DOCUMENT RESUME

ED 470 588 HE 035 492

TITLE	Research Relationships between Higher Education Institutions and the Charitable Sector. A Report by JM Consulting to the HEFCE on Mapping and Good Practice. Research Report.
INSTITUTION	Higher Education Funding Council for England, Bristol.
REPORT NO	HEFCE-02/07a
PUB DATE	2002-02-00
NOTE	91p.; For the companion report, HEFCE 02/07, see HE 034 710.
AVAILABLE FROM	Higher Education Funding Council for England, Northavon House, Coldharbour Lane, Bristol, BS16 1QD England. Tel: 0117-931-7317; Fax: 0117-931-7203; Web site: http://www.hefce.ac.uk.
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	*Donors; Foreign Countries; Higher Education; Partnerships in Education; *Philanthropic Foundations; *Private Sector; *Research; Research Universities
IDENTIFIERS	*England

ABSTRACT

This report maps the range of existing research links between higher education institutions (HEIs) and charities and helps readers understand the factors that drive and influence these links. The report also discusses issues and difficulties that may inhibit maximum value for both parties and recommends how links could be developed to mutual advantage. The report also looks in depth at financial issues, especially those related to cost recovery by HE institutions on charity-funded research. A summary of the issues in this report and recommendations to both HE and charity sectors are in the companion report. Five appendixes discuss the study methodology and present additional details about charity funded research. A glossary is included. (Contains 12 tables and 5 figures.) (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 470 588

Research report
HEFCE 02/**07a**
February

Research relationships between higher education institutions and the charitable sector

A report by JM Consulting to the HEFCE on mapping and good practice

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

R. Kier

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

HE035492

© HEFCE 2002

BEST COPY AVAILABLE

Contents

			Page
1	**Introduction**		
	1.1	Terms of reference	2
	1.2	Study method	2
	1.3	Acknowledgements	2
2	**Charity research in the HE sector**		
	2.1	Context	3
	2.2	The volume and range of activity	3
	2.3	The institutions funded	7
	2.4	Types of grant	8
	2.5	Funding and careers of research staff	10
	2.6	The contribution of charities to HEIs' research strategies	15
	2.7	Financial aspects of charity funding	17
3	**The charity sector and research**		
	3.1	Charities and charity legislation	22
	3.2	Types of charity	23
	3.3	Medical and biosciences research	26
	3.4	Social science and social policy research	29
	3.5	Arts and humanities research	31
	3.6	Charities' funding of research	32
	3.7	Survey of charities	34
4	**Benefits, issues and good practice**		
	4.1	Benefits for the charity sector	37
	4.2	Benefits for HEIs	38
	4.3	Issues and concerns	39
	4.4	Summary of good practice for HEIs	49
	4.5	Good practice for charities	51
Glossary			**52**

Appendices

A Study method and sources of information
B Tables of statistics on charity-funded research in higher education
C Results of survey of 'Top 300' charities
D Illustrations of cost recovery on charity and Research Council funded projects
E The total costs of research activity for charities and Research Councils, and their funding

1 Introduction

1.1 Terms of reference

1.1.1 The purpose of this report is to map the range of existing research links between HEIs and charities; to help readers to understand the factors which drive and influence these links; to investigate issues or difficulties that may inhibit maximum value for both parties; and to recommend how links could be developed to mutual advantage. As part of this remit, the report also looks in depth at financial issues, particularly related to cost recovery by higher education (HE) institutions on charity-funded research. A summary of the issues in this report and recommendations to both the HE and charities sectors are in the companion report, HEFCE 02/07.

1.2 Study method

1.2.1 The study was commissioned by the HEFCE in November 2000. Most of the work for this review was done in the first half of 2001. It included:

- surveys of charities with research in their objects and of the larger charities likely to fund research;
- meetings with individual charities, focus groups, and representative groups;
- discussions with representative bodies in HE;
- visits and case studies at individual HE institutions;
- advice and support from an advisory group.

1.2.2 Further details of the terms of reference and study method are given in Appendix A. Although the report is addressed to the HEFCE, our research was done across the UK, and most of our conclusions and recommendations are relevant UK-wide.

1.2.3 The scope of the review is wide in terms of the mapping, but the main focus is on charities which do or may fund research in higher education. We have therefore excluded charities which are predominantly publicly funded or otherwise inappropriate (such as universities; public bodies; NHS Trusts; independent schools).

1.2.4 We include a Glossary of some key terms in Appendix A.

1.3 Acknowledgements

1.3.1 We are grateful to all those who have assisted with the research and discussions which underpin this report. They include particularly the members of the advisory group, and the institutions, charities and other organisations listed in Appendix A.

2 Charity research in the HE sector

This chapter maps the current pattern of charity funding of research in the HE sector. The mapping of the charity sector itself is in chapter 3.

2.1 Context

2.1.1 This chapter assumes that most readers are familiar with the HE sector and with general developments in research policy, as covered e.g. in 'Review of research' (HEFCE 00/37, September 2000).

2.1.2 The issues most relevant to this review concern three main areas:

a. the diverse range of institutions in the sector, which have very different profiles in terms of their overall research activity, and the place of charity-funded research within this. These different groups of institutions position themselves differently in terms of research strategy, and they also have different views and attitudes about the issues addressed in this report.

b. the funding of research, in particular the relationship between the various components of what used to be called the dual support system, but is now a multi-source support system for publicly funded research. Here the impact of charity-funded research is just part of a broader picture which is discussed below and in the policy report (HEFCE 02/07).

c. the financial situations of individual institutions, which includes the impact of historic under-investment in research infrastructure and the decline over recent years of the unit of funding for teaching. This has led to what is often called 'overstretch' of many academic staff and research facilities, and consequent negative impacts on institutions' capacity to respond to charities and other external sponsors of research.

2.2 The volume and range of activity

2.2.1 This section provides an overview of the current set of relationships, drawing chiefly on published HE sector data, but also including data generated specifically for this study. The tables referred to in the text are provided in Appendix B.

Growth and volume of activity (Table 1)

2.2.2 Table 1 shows the trend in research funds by charities and by all research sponsor types for the UK, and for England, over the past 11 years. The total annual amount of research funded by charities in HE in the UK has grown from £156m (England £132m) in 1989-90 to £484m (£401m) in 1999-2000. This is a growth of approximately 200% over 11 years.

2.2.3 The total charitable funding received by HEIs has grown more or less in step with the total of all research grants and contracts (UK £763m in

1989-90 to £1973m in 1999-2000). As a percentage of total research grants and contracts, charity funds have been in the range of 20% to 25% throughout this period. In terms of volume, charities research makes up closer to one third of the total (because the income figures above include indirect costs paid by other types of sponsor).

2.2.4 This rapid growth in externally funded research has occurred at a time when core public funding for higher education (e.g. the HEFCE block grant) has been relatively static. It is well known that the unit of funding for teaching (£ per student) declined significantly over this 11-year period as institutions were encouraged to expand student numbers without commensurate increases in funding. The HEFCE core funding for research (called QR), which is intended to provide funding for so-called 'blue skies' research as well as support for research infrastructure, grew much more slowly over this period.

2.2.5 The trends over the 11 years since 1989-90 could be summarised as follows:

- total UK research grant and contract funding has grown by approximately 160% from £763mm to £1973m;
- charity funding for research grants and contracts (UK) has grown by approximately 200% from £156m to £484m (the growth in charity funding of research feels faster to some, but this is probably because of concentration in some HEIs and capital funding such as JIF);
- QR (which has to support the infrastructure for the above) has grown by approximately 70% in England: from £432m to £738m;
- QR in England has therefore declined relative to the total R grant and contract funding. It was 70% of the size of this in 1989-90 and is down to 46% in 1999-2000.

2.2.6 The total of the project elements of public and charity funding (Research Councils, EU, charity, government departments) has therefore outgrown the QR funding for HEIs' infrastructure by a wide margin. Strictly, under the dual support system, QR should perhaps only be expected to fund infrastructure to support Research Council projects. However, there is some ambiguity about this, and many charities perceive that their work was included under dual support at the time of the University Grants Committee. Whatever the Government's present view of the relationship of charities to the dual support system, it is clear that there has been no explicit funding stream available to the HE funding councils to make this a reality.

Medical charities (Table 2)

2.2.7 Within the total of charity funding, the research funding by members of AMRC – The Association of Medical Research Charities – has also grown rapidly from £177m in 1989-90 to £552m in 1999-2000. This rate of growth (about 200% in 10 years) is in line with that shown by

HE statistics discussed above and shown in Table 1.

2.2.8 There has been additional charity funding not shown in Tables 1 or 2, specifically to support research infrastructure.

2.2.9 Table 2b shows the breakdown of AMRC expenditure for 1999-2000 by main categories of spend. This includes overseas expenditure, expenditure on capital, and non-research expenditure which are excluded from the statistics above.

Wellcome Trust (Table 3)

2.2.10 Within the medical charities the contribution of the Wellcome Trust has been exceptional, both to research funding and to infrastructure support. Table 3 shows that:

a. Wellcome Trust funding for the main research grant types to UK HEIs (Project Grants, Programme Grants, and Personal Awards) has grown from £133m in 1996 to £280m in 2000, a growth of 100% in four years.

b. Wellcome funding for the grant types that specifically contribute to infrastructure (JIF, institutes, equipment, buildings, centres, research facilities) has grown from £83m in 1996 to £150m in 2000, a growth of 80% in four years.

2.2.11 The recent period has seen exceptional growth in the funds available to the Wellcome Trust, and this has had a major impact on the growth of charity funding of research overall. It is unlikely that this rate of growth will continue. The general view of AMRC and others is that future growth in charities' research spending will be flatter than in recent years. This was confirmed by the responses to our surveys of charities (discussed later).

The range of disciplines or fields of study supported (Tables 4, 5, 6)

2.2.12 Table 4 shows funding by HESA cost centre and by research sponsor type for 1998-99. This shows that there is significant charity funding (over £1m a year) for research in 25 of the 41 HESA cost centres covering a wide spread of disciplines. However, there is also a significant concentration of charity funding in a smaller number of fields.

2.2.13 The 'top eight' cost centres for charity funding, in descending order, are as follows:

- clinical medicine
- biosciences
- anatomy and physiology
- pharmacology
- veterinary science

- social studies
- psychology and behavioural sciences
- chemistry.

2.2.14 There is a ratio of 30:1 between the total value of funding in the first cost centre (clinical medicine) and the eighth.

2.2.15 The leading eight cost centres for all research funding cover a broader range of disciplines, as shown below. There is a less steep concentration effect here with a ratio of 10:1 between number one and number eight:

- clinical medicine
- biosciences
- physics
- chemistry
- electrical engineering
- social studies
- mechanical engineering
- earth, marine and environmental studies.

2.2.16 Table 5 provides details of charity funding by broad subject area defined as groups of cognate Units of Assessment (UoAs) from the Research Assessment Exercise (RAE). This again shows the overwhelming dominance of the medical UoAs, with scientific UoAs in second place, and all other fields relatively very small.

2.2.17 In policy terms, it is convenient to think of charity funding of research in three broad fields, each with its own characteristics:

- medical and natural sciences
- social sciences
- arts and humanities.

2.2.18 These are described in more detail in chapter 3. Table 5 shows the relative funding in these three areas. Charity funding as a proportion of total funding is most significant in the fields of medicine and biosciences; in humanities; and in the social sciences. It is relatively low in the science and technology areas.

2.2.19 Table 6 shows the individual figures for charity funding in the top ten Units of Assessment. These are all within the clinical medicine/biosciences area, and together account for 84% of all charity funding in the HE sector. The top 5 of these UoAs alone (shown below) account for more than two-thirds of all charity-funded research in HE:

Unit of Assessment	% of total charity-funded research in HE
Hospital-based clinical (UoA 3)	34%
Clinical laboratory science (1)	13%
Biological sciences (14)	10%
Community-based clinical (2)	6%
Biochemistry (12)	6%
Top 5 UoAs	70%

2.3 The institutions funded

The range of institutions (Table 7)

2.3.1 The HE sector in the UK includes some 170 institutions (approximately 130 in England) which have a range of backgrounds. In terms of their research profile and the way they appear to the charity sector, they might conveniently be grouped into three main types which are summarised below and listed in Table 7.

Group A: Research-intensive, multi-faculty universities with medical schools. There are about 20 institutions which have external research funding across a broad range of disciplines, but medical research sponsorship is often dominant and there is therefore a particular relationship with the medical research charities. Within Group A, the four leading research universities (Oxford, Cambridge, Imperial, and UCL) receive nearly half of all charity funding in the HE sector (see below).

Group B: The next most research-active HEIs outside Group A. These may have research strength (and charity funding) in a number of discipline areas, but without the very large volume of externally sponsored research or the predominant relationship with the medical research charities. We have listed the next 20 institutions by proportion of research funding in Table 7.

Group C: The remaining institutions include predominantly teaching universities, university colleges and smaller specialist colleges (e.g. music, art, agriculture) which have a lower relative proportion of research funding. They nevertheless may have important elements of charity support in particular fields. There are 88 institutions in England in this category.

2.3.2 Table 7 provides a list of the institutions with significant research income. The average charity funding per English institution was approximately £19m in Group A, £2.5m in Group B, and £350,000 in Group C. 76 English institutions (62%) had charitable research income of more than £100,000; 46 (37%) more than £500,000; and 30 (24%) more than £1m.

2.3.3 A small number of institutions do not fit neatly within the three groups. These include stand-alone medical schools (like St Georges Hospital)

and other institutions where charity funding makes up an unusually large part of the whole institution (like the University of Dundee, the Royal Veterinary College, and the School of African and Oriental Studies).

Concentration of charity funding

2.3.4 As already noted, there is a strong concentration effect in institutions paralleling the concentration in disciplines. The top 5 institutions by total research funding attract nearly half of all charity income in the HE sector, and for three of them charity income forms at least one-third of their total research portfolio:

Charity income for the top 5 institutions (from Table 7)

HEI	Charity income 1998-99 £m	As % of total HEI research income	As % of total charity income in HE
UCL	51	41	12
Oxford	39	33	9
Imperial	32	26	7
Cambridge	30	28	7
Kings	27	35	6
Top 5 HEIs	180		

2.3.5 In all institutions in Group A, charity funding accounts for at least 15% of total research funding, and for many the figure is more than 20%. These HEIs are where the major part of all charity funded research is done, and where any strains associated with this rapid growth in activity will be most apparent. We have therefore focused on this group. There may even be circumstances in this small group of institutions where the overall percentage of charity-funded research is closer to 50%.

2.4 Types of grant

2.4.1 There is a range of types of charity funding which HEIs can use to support research. In broad terms funding could be categorised as:

a. grants which primarily support activity: project and programme grants (there are important distinctions between these which we discuss later);

b. grants which primarily support people: studentships and fellowships;

c. grants which provide a specific contribution to research infrastructure as units, centres, equipment, buildings (e.g., JIF and SRIF);

d. charitable endowments and donations which can in certain circumstances be used for research.

2.4.2 There is no comprehensive national data available on the relative volumes of these types of grant.

2.4.3 The last category above is really outside the scope of this study. A few institutions (chiefly Oxford and Cambridge) have significant endowment assets and income from these, as well as (small amounts of) income from local hospital Trusts and other charities with whom they have a particular relationship. The picture is complex: this income is not necessarily shown in a consistent way in accounts but some institutions describe these as 'Trust funds'. Such funds may or may not be used for research. If they are, both income and costs will be matched under the Transparency Review. They may be reported as charity-funded research, and if so will contribute to the overall costs and benefits of this type of research. We have ignored such funds in our work. Their presence or absence has no material impact on our discussion of cost recovery and the calculations we make on this in Appendix D.

2.4.4 We now turn to the main sources of charity funding for research listed above. Table 8, based on information from some of our case study charities, shows that there is a wide variation between charities in terms of the balance between the four types of funding above. It is reasonable to expect that HEIs who have a strategic approach to research will try to maintain a balance of types of grant so that they receive support for infrastructure as well as for research activity.

2.4.5 A number of these types of grant make some contribution to infrastructure costs. As well as those which do so directly (equipment grants, JIF and SRIF etc), project grants can sometimes include equipment, and fellowships can include a contribution to Principal Investigator (PI) costs.

2.4.6 It is important to note these differences in the context of the issues about infrastructure costs and recovery of indirect costs of projects. It would be misleading to quote a total figure of charity funding for research as a basis for any estimate of infrastructure or indirect costs requirements. We have not done this: our conclusions on this issue are based on actual cost recovery calculated from the Transparency Review set against income from charities.

2.4.7 There is a trend amongst the large funders to offer more programme grants which are larger and longer-term than project grants. A specific example of this is the Medical Research Council's Co-operative arrangements in which a consortium approach is adopted with (e.g.) charities involved alongside the Research Council. These appear very efficient from the public expenditure point of view in that they are perceived to lever additional charity funding to supplement that from the Research Councils.

2.4.8 A number of funders also provide grants for units or centres which include some contribution to infrastructure and management costs, as well as the direct costs of the research.

2.5 Funding and careers of research staff

2.5.1 This is one of the major issues raised by all external funding of research and a specific remit of this review. A high proportion of research staff are funded on short-term contracts and this poses particular problems for HEIs.

Number of staff affected

2.5.2 In the UK 30% of institutions' full-time staff numbers and 80% of research-only staff are financed wholly or partly through sources other than the institution (i.e. other than from funding council grants and other institutional resources) (source: HESA FSR 1998-99). Additional staff number are partly funded by the institution, and partly through other sources.

2.5.3 These proportions are probably the same for charities as other sponsors. So if charitable activity is one-third of total research grants and contracts then it might account for 10% of full-time staffing. This is an understatement as it ignores most PI time.

2.5.4 To illustrate the possible scale of this, we were told that the medical school at Oxford had over 1000 academic and research staff, of whom only about 150 were on permanent 'HEFCE-funded' contracts.

Issues

2.5.5 The issues for research staff careers and employment with respect to charity-funded research are the same as with other funders. Research staff have historically been funded through what has been considered to be 'soft money', and the insecurity and perceived risks of this have led to their employment on short fixed-term contracts. This has had an adverse effect on their pay and conditions of employment, career development and prospects, and security of tenure. It can also have an adverse effect on research productivity when such staff have to spend a significant part of their time seeking funding to enable them to continue their research.

The Concordat and Research Careers Initiative

2.5.6 In 1996 representatives of institutions and the principal (government) funders of research in the UK agreed a concordat concerning the management of these staff. This was followed by the Research Careers Initiative (RCI – set up by OST and Universities UK) to monitor progress towards meeting the commitments of the Concordat.

2.5.7 The Concordat has led to action in HEIs in several ways:

- training provision;
- appraisal schemes;
- dissemination of relevant documentation;
- pay and grading structures;
- careers guidance;
- improving communication between staff and managers (supervision, integration into department life);
- collection of data.

2.5.8 More radically, it has required HEIs to identify visible career pathways. Steps in this include abandoning redundancy 'waiver clauses' and developing systems to assess cases for transferring contract research staff onto more permanent contracts. Practice is currently patchy but there are some good examples already in place. For example, one institution has all staff on permanent contracts even though many are funded by soft money. Another has introduced a formal arrangement for reviewing all fixed-term contracts lasting more than six years. If the staff member has a proven ability to raise research income and to undertake quality work, and their area of expertise is considered to be of continuing demand by sponsors and the HEI, they are moved to permanent contracts.

2.5.9 Successive stages in 'improving' practice here could include: (a) decoupling contract periods from contract dates; (b) providing bridging funding; (c) introducing rolling contracts; (d) permanent contracts.

2.5.10 As part of the HEFCE's wider commitment to good management practice, they are funding a major project to identify and develop tools in the area of career management of Contract Research Staff (CRS). The project is a direct result of the Concordat and the RCI, targeting specifically the areas of identification of development needs, staff review, and careers guidance.

2.5.11 The project is in four strands:

(i) Development of a system to track the careers of CRS, aiming to identify key factors in the successful and unsuccessful career transitions of CRS;

(ii) Development of a Continuing Professional Development (CPD) Matrix to guide CRS in developing a range of skills, addressing each skill on a number of levels, and outlining the kind of experience and evidence needed for proficiency in each skill;

(iii) Production of a guidebook for grantholders, outlining their role as research manager, and a guidebook for CRS, both of which emphasise work based learning and offer guidelines in building opportunities into grants for CRS career development;

(iv) Production of good practice guidelines for reviewing CRS and staff review materials, concentrating very much on the future of CRS by way of effective career planning within the framework of regular staff review meetings.

2.5.12 There will soon be legislation supporting the Concordat's principles (The European Community Directive on Fixed Term Work). Broadly, this will require that fixed term employees will need to be treated as fairly as permanent employees.

Charities' contribution

2.5.13 The Concordat and its principles are being supported by charities in a number of ways: some, like Wellcome, explicitly 'expect that the institution will employ fixed-term contract staff at no less than the standards set out in the Concordat'. The Concordat could be seen as part of a more general initiative on human resources management in higher education which is needed to protect and enhance one of HEIs' most valued assets – the knowledge and skills of its staff.

2.5.14 Charities, and the UK economy, require the continuing availability of highly talented and trained staff, not lost to industry or to the UK, and strong teams able to sustain high quality research over time. These are long-term requirements which take time to establish, and, once lost, may take a long time to re-build. Currently many lead researchers are finding that it is 'easier to get project grant funding than good people'. The problems are not confined to researchers; it is similar for research technicians who often have no definite future beyond their immediate project funding.

2.5.15 Bridging schemes (after the research project is finished, to allow time to obtain another project) can be important in retaining well trained and motivated staff whilst not losing their focus during the final year of the project if they need to look for a new post. Some charities contribute to bridging costs.

2.5.16 The Concordat also invited sponsors (including charities) to contribute to any contractual redundancy payments.

2.5.17 Improved terms and conditions of employment help to retain good staff. Wellcome's new pay scales have dramatically improved prospects for the staff funded through their schemes. Other sponsors (e.g. Research Councils) have followed suit. However, some other charities which recognise the need to improve pay and conditions are concerned that they may be unable to match the Wellcome action, and they may suffer as a result.

2.5.18 The range of fellowship schemes is proving invaluable in attracting and retaining staff and contributing to world class research based in the UK. Some fellowship schemes of the larger charities are more

favourable than those of the Research Councils, and enjoy at least equal academic status.

2.5.19 Other less formal arrangements from charities have led to similar results – e.g., an individual had come across from the US to lead a unit that had long-term funding from a charity. The stability of that arrangement was very attractive, and he aims to make the centre a leading unit in its area.

2.5.20 Programme grants, unit and centre funding, and co-operative group arrangements all contribute to stability and therefore the attractiveness of research for staff. However, they also create rigidity in the system and need to continue to be counterbalanced by opportunities for young researchers, and for exploratory research by smaller teams.

2.5.21 There are a wide range of fellowship and studentship schemes available, although numbers of posts available are difficult to obtain. Certainly most are very competitive. These schemes are often targeted: at existing academic staff, or at external staff, or even at researchers abroad. They may be for academics about to embark on their research careers, for those at the most productive time of their academic careers, for clinical academics to allow them to spend time on research, and for those at the end of their careers.

2.5.22 There can be issues when these fellows reach the end of their funding and are moved onto lectureship salaries, when they are already paid above the level at which these would normally be appointed.

Financial implications for HEIs

2.5.23 There are significant costs for HEIs in providing a proper staff management environment for staff on short-term contracts. These costs are not normally covered in the direct costs of research grants and projects.

2.5.24 For example, the requirement to find matching funds for some fellowships has led to some departments carrying out what they consider to be inappropriate commercial work to try to raise the funds (from recovered indirect costs) to support a keen academic. Some research staff are deemed too 'old' or at too high pay scales to be supported on some fellowships or research projects, which contributes to difficulties in supporting good teams on a permanent basis over time. It also leads to a waste of a cadre of high quality research staff who may not be the leading researchers in a field, but are able to provide really solid research input into projects and programmes led by that 'elite'. This means that managers of research teams and units need to spend considerable time in recruiting and training new staff, when these 'post-40' year-olds have to leave. A more appropriate funding policy would be 'to judge the science and then pay the person their proper cost'.

2.5.25 It is obviously helpful for sponsors' decisions on renewal and extension of fellowships to be made as early as possible. Full support for pay awards and terms of conditions comparable with permanent staff (vacations, maternity leave etc) is important, as is the need to encourage research staff to integrate themselves into departments, participate in some teaching, etc. Some lead researchers have experienced problems in getting charities to fund the full costs of an individual's promotion.

People and project management costs

2.5.26 Perhaps the most immediate need is for HEIs to obtain funding for the people management and project management costs that sustain and develop high quality productive research staff and research projects, and will allow them, and their sponsor charities, to fully realise the benefits from this.

2.5.27 People management and project management costs are not recognised as a cost by all HEIs and are not specifically funded by most charities. They are departmental costs as they relate to the management of a suite of research projects, and a team of research staff. The costs are project costs, but are not always identifiable with one particular project. However, they could appropriately be considered as part of the eligible project costs for funding purposes. They might be of the order of 10 to 15% of staff costs.

2.5.28 These people management and project management costs include:

- bridging and 'sunsetting' funds (when institutions are required to continue with posts once the grant-funding has stopped);
- maternity leave;
- sick leave;
- career counselling;
- training;
- time spent in the supervision of research staff;
- time spent in bidding for work;
- recruitment costs (advertising, interviewing);
- any redundancy payments to contract staff;
- the costs of protecting and exploiting IP (which can ensure that charitable aims of 'for the public good' are supported);
- conference travel;
- variable office management costs relating to these projects and staff (officer manager/administrator, communications, minor consumables etc).

2.5.29 Funding in this area should help to encourage enlightened people management and to 'realise the potential'. Charities have an interest in this because the achievement of their missions depends on the supply and development of well-trained, talented and motivated research staff

within the universities. However, some charities already contribute part of these costs and further consideration would need to be given to the appropriate additional cost to be funded.

2.6 The contribution of charities to HEIs' research strategies

Background

2.6.1 Research is an increasingly important part of the role of many HEIs. There are a number of drivers for this but they include:

- the importance of research to the economy and to achieving national social and policy objectives;
- the increase in external funding for research;
- the value for institutions in helping to differentiate themselves and to attract both students and staff (especially from overseas);
- the perceived value of research as a further source of more flexible income in a period when public funding for teaching has been both declining in unit terms, and strictly controlled in terms of the scope for growth of student numbers;
- the increasing importance for HEIs of work with external agencies and the role of research in building partnerships and providing a base for other (third mission) activity.

2.6.2 The large national charities are effectively 'equivalent to Research Councils' in terms of the academic value of the work they fund and its contribution to both HEI and to the national knowledge base and economy. The benefits for HEIs at this level are similar to those from Research Council work, and include:

- the charitable money employs research staff and so increases research activity;
- without this funding there would be barriers to investigation. There would be little or no research in some areas without charitable funding;
- it permits HEIs to maximise potential; and
- 'a lot of our most exciting work is done with charities'.

2.6.3 Charities are generally acknowledged to be flexible and supportive funders. They are seen to facilitate, not hinder, if there is a problem – supportive, not intrusive. They will generally help to overcome a problem as long as it is within the spirit of what the charity wants to have done.

2.6.4 The Wellcome Trust are particularly praised for their flexible approach: they provide a contingency; if costs change they generally fund at a new level if asked; researchers can vire between cost headings with justification; if another research assistant is needed on a project this will be funded; they fund seven years of a five year fellowship if they do not renew it at the end of the five years, to ensure

that the fellow can finish the research.

2.6.5 Researchers say that this attitude creates an appropriate environment for high quality research – there is no evidence that such flexibility leads to any loss of value for money, or of accountability. Wellcome 'puts the scientists first' – they 'trust good scientists to have money and to do good work'.

Volume and quality

2.6.6 As the statistics above show, the total charity contribution to research in UK HE is now approximately one-third of total research funding, and is equal to the total contribution from the Research Councils.

2.6.7 A large part of the research funded by charities is of a high academic quality and is comparable with that funded by the Research Councils. The large funders operate procedures for invitation, selection and review of projects which are not dissimilar to those of the Research Councils. The AMRC have been influential in ensuring the widespread adoption of peer review by their members, and other large funders operate similar or equivalent quality assurance procedures.

2.6.8 Not surprisingly in such a diverse sector, there are examples of smaller or more occasional charity funders of research where project selection is poor and there is inadequate control of quality. Some work is legitimately of lower academic interest or value because it is directed towards the specific interests of the charity.

Public benefit

2.6.9 Most charity-funded work ranks highly in terms of the national interest in the work and the public benefits it generates for the nation.

2.6.10 For the purpose of this study, we are interested in the public benefits which arise from research where there is a substantial mutual interest in the outcomes. The benefits to HEIs from such research with charities when it is defined in this way include:

- high academic quality usually confirmed by peer review;
- freedom to publish, which builds academic reputation and can lead to funding in the HEFCE QR grant based on the RAE;
- ability to share in benefits of intellectual property rights;
- relevance to national policy and associated reputation and profile;
- public benefit and relevance to society;
- valuable form of scholarship for teaching staff, and hence benefits to students;
- other opportunities – e.g. for consultancy and other 'third stream' activity
- income, equipment and facilities gained without full costs being borne by the institution.

2.6.11 This is the kind of research which we refer to as of 'national interest' or public benefit. The evidence from our research is that most charity-funded work is of national interest as defined above. In particular, HEIs are normally free to publish and exploit the work for academic benefits (possibly after obtaining the funder's approval).

Commercial benefits and Intellectual Property

2.6.12 The position on commercial exploitation of IPR is less clear-cut. With publicly funded research (QR and Research Councils under dual support) it is expected that the institution will be free to exploit IP. With privately funded research and consultancy, IP normally belongs to the client.

2.6.13 The position with charities is between these. There is a growing trend for charities wanting a share of any financial benefits from exploitation of IP. The Charity Commission makes it explicit that a charity has to 'ensure it gets a share of IPRs which is proportionate to its direct or indirect contribution to the generation/translation of the relevant knowledge and information' (see Charity Commission Guidance for charities carrying out, funding or commissioning research).

2.6.14 The Wellcome Trust has an organisation (Catalyst) to help HEIs to exploit IP, and generally expects to share in any income streams. A number of other larger charity funders of research do the same.

2.6.15 There is some confusion about the relative importance for the HEI of rights in terms of ownership of IP; exploitation rights; or rights to a share of income streams. A group of universities are trying to negotiate a standard approach to these to reduce the problem of each charity negotiating a different basis. The larger medical charities we interviewed considered that they have more experience, and are better placed to manage IPR than their partner HEIs, but they stressed that this did not mean that the HEI should not benefit from the IP generated by the research.

2.7 Financial aspects of charity funding

The adequacy of research infrastructure

2.7.1 The HEFCE Review of Research noted that there has been deterioration in the state of the research infrastructure in HEIs, and it attributed this partly to the current system of funding of research which gives incentives to institutions to maximise their volume and quality of research, but not to invest in the long-term infrastructure for research.

2.7.2 Evidence for the under-investment in research infrastructure has been largely anecdotal to date, but the Transparency Review is beginning to provide more quantitative indicators of this. A full research study of this issue has been commissioned by the Office of Science and

Technology. This will report in early 2002 and is likely to demonstrate that there has been significant under-investment in the research infrastructure. The study will also review the extent to which this has been rectified by JIF and SRIF. This is not solely a matter of bricks and mortar, or high-technology equipment. It includes investment in estate maintenance and renewal; plant equipment and services; libraries; IT networks; technical support staff; and investment in research workers themselves, which would include things like time for scholarship and staff development; and career management and training for younger staff.

2.7.3 These are serious issues for the research base, but they are not specific to charities. There are many reasons for the under-investment in research infrastructure, but they clearly include the increase in the volume of externally funded work which does not make a full contribution to indirect costs (and this would include research funded by Research Councils, UK government departments, and the EU, as well as by charities).

Indirect costs and contribution

2.7.4 It is a matter of principle for the charities that they do not pay overheads – because (in many cases) of the source of their funds. Charities are still regarded by the Government as private sources of funds, and our understanding of policy is that they are specifically not intended to be covered by the dual support system for research. The dual support with an underpinning element from DfES (Education funds) was established to provide the basic research infrastructure (formerly described as the 'well-found laboratory') to support the project work (from DTi funds) funded by the Research Councils.

2.7.5 We note that some charities have a different view (i.e. that they are, or were, intended to be included within dual support). The scope and basis of the dual support is not precisely defined, and at the time of the last policy attention to this (when the transfer to the Research Councils was made) the issue of how to underpin charity-funded research was not addressed (although there had been a UGC policy of supporting charity-funded research at universities).

2.7.6 It is now generally accepted that the dual support system has changed very significantly (notably with the relative growth of the DTi – project – element, with no commensurate growth in the DfES – infrastructure – element, and also with the introduction of NHS infrastructure for HEI research as a third leg of support) and with the other pressures noted above. The image of a small raft, with an increasing number (and size) of skyscrapers being built upon it has been used to illustrate these trends.

2.7.7 In order to evaluate the financial impact of charity-funded research, it is useful to set it in the context of the other main research sponsors,

with whom universities naturally compare their charity funding.

Sponsors funding less than full costs

2.7.8 Most of the research sponsors listed above fund less than the full economic costs of the work (as measured by the Transparency Review) to the HEI. What they actually fund varies between individual sponsors and projects; see the summary in the box below.

2.7.9 It is now clear (with firm evidence for the first time) as a result of the Transparency Review, that all of these research sponsors pay significantly less than the full economic costs of research to the HEIs.

What research sponsors actually fund

Research Councils
Research Councils pay eligible direct costs (excluding the time of permanent academic staff), plus a 46% contribution to institutional indirect costs (46% of eligible direct staff costs). HEFCE, through QR funding, provide an additional funding per Principal Investigator, and per Research Assistant, (weighted for subject and quality) (also per fellow and studentship).

Government departments
The Department of Health is a special case and can be regarded in many ways as a third leg of the support system of research (because of the uncharged access it provides to NHS facilities including patients to support HE research; and cost-sharing arrangements such as reimbursed salaries).

Other government departments generally fund research at a level broadly comparable to the Research Councils (i.e. direct costs plus a contribution of around 50% to indirect costs).

EU
There are three bases currently in use – Additional Cost, Full Cost Fixed Rate and Full Cost. Additional cost is calculated at marginal costs (staff and non-staff) plus 20% of these costs for a contribution to overheads. Full Cost Fixed Rate covers the same costs plus a flat rate contribution to overheads (80%), of which 50% is funded. Full Cost allows institutions to apply their own calculated overhead rates to staff costs as the overhead contribution (and again funds 50% of total costs). The Transparency Review will allow institutions to meet the robust cost requirements for the latter method (not previously possible).

Charities
When asked, charities generally pay the total direct costs of research, but with no contribution to HEI indirect costs, or to the costs of permanent academic staff time. Exceptions to this are capital grants, fellowships (buy-out from teaching), and isolated examples of funding of a member of permanent staff or office costs. Centres are a further exception where some charities contribute to management and infrastructure costs.

Recovery of costs on charitable work

2.7.10 Charities are not deemed to be supported by the dual support system, or by past public investment in HE research infrastructure. The HEFCE have recognised the issues here by assisting universities in the way they allocate their funds, but this is not the same as a government commitment (which clearly has not existed) to match the growth of

charity-funded research with additional funding for HE infrastructure.

2.7.11 The HEFCE calculation of mainstream QR related to charity-funded research is calculated on income; numbers of research assistants; and number of research-active permanent academic staff (the last two apply for all research work). The tables in Appendix D show these calculations and how cost recovery on typical charity and Research Council projects compare for different types of project and department.

2.7.12 These calculations require making assumptions about the way that QR is intended to be used. These examples are illustrative only. They do not necessarily reflect the way that institutions choose to allocate their research funding internally. Moreover, there is (as far as we are aware) no statement from the Government or the funding councils about what types of research are intended to be supported by QR, and different interpretations here could lead to significant differences in the conclusions in Appendix D. The Appendix has been included because we found that many staff in institutions were unaware of the HEFCE allocation based on charity income, and these illustrations may be helpful in thinking through the issues.

2.7.13 The position with cost-recovery on charity-funded research is part of a broader problem, and the under-recovery on charity funded projects is not necessarily materially different from that on Research Council or other public funded research.

2.7.14 The tables in Appendix D show in particular that, when QR is included (England only):

a. the recovery percentage on charity contracts is much more sensitive to RAE grade than is the case for Research Council or EU contracts;

b. at lower RAE ratings (e.g. 3 or 4) the recovery on charity projects is relatively poor compared with Research Council projects;

c. at high RAE ratings (5 and 5*) it is much better: charity projects can have a higher recovery than EU projects and are comparable to those funded by Research Councils;

d. when significant non-staff costs are involved, charity project funding improves relative to those of the Research Councils.;

e. where non-academic staff costs (e.g. technicians) are involved, charity projects show a lower recovery than the Research Councils.

2.7.15 If QR is excluded from these calculations the recovery on charitable projects is significantly lower in all cases than that of the Research Councils.

2.7.16 This analysis does not take into account the time lag between the work and receipt of QR monies (QR in one year relates broadly to the average of the last three years of charitable income). Moreover, the

RAE is historical, and so the weighting factors for RAE grade last five or so years.

2.7.17 QR comes to institutions as a block grant. Institutions' internal resource allocation mechanisms vary greatly. In some cases departments will benefit from the QR compensation on their charity funded research, others may not. The same applies to the overheads elements that comes with Research Council and other grants. Depending on the way that these are allocated internally, academic staff may receive signals and incentives about the relative attractiveness of Research Council and charity-funded projects, which differ significantly from the actual institutional position.

2.7.18 In 2001-02, the HEFCE QR element for charity-funded research has declined by 9% as the volume of this research has grown (the overall sum available to the sector has remained constant relative to all QR funding, whilst charitable activity has increased).

2.7.19 These facts mean that the picture on financial implications of charity funding of research is actually quite complex and will differ between institutions and departments within them in quite subtle ways which will be driven by a combination of:

- RAE ratings;
- the balance of work in different disciplines;
- the nature of the charity funded projects (i.e. mix of costs);
- the mix of types of grant received (e.g. project, fellowship, centres).

2.7.20 However, the key message from Appendix D is that the absolute levels of recovery do not vary between sponsor type, or department grades, as much as might be expected. This is because the two most significant items, researcher and non-staff costs element, are either totally funded or significantly underfunded in all cases. This tends to flatten differences between the sponsor types and department grades.

2.7.21 The policy implications of these financial arrangements are discussed in the policy overview report, HEFCE 02/07.

3 The charity sector and research

This chapter maps the involvement of charities in research from the perspective of the charities sector. The sector is large and diverse, and it is not easy to obtain comparable data about the income, policies, and research spend of charities across the sector as a whole. It is also difficult to make general statements about charities and their research because experience and perceptions differ between them.

In this chapter we present some basic information about the sector, including the results of surveys we have conducted for this study, and we review research activity of charities in three of the main fields where they fund research (medical/scientific; social sciences; arts and humanities).

Statistical data are provided in Appendix B.

3.1 Charities and charity legislation

3.1.1 A charity is defined as a body set up for exclusively charitable purposes. These could include: relief of the poor; advancement of knowledge, education or religion; health promotion and medical research. In England and Wales, all except very small or otherwise exempt charities have to register with the Charity Commission.

3.1.2 In 2000 there were more than 185,000 charities registered with the Charity Commission, with a combined income of £24.6 billion. Whilst the number of charities has been growing slowly (by about 1% per annum) – and indeed declined slightly between 1998 and 2000 – their combined income is growing rapidly, with an increase of 20% between 1995 and 1998 and a further increase of 25% between 1998 and 2000. The recent growth may be largely due to the impact of the National Lottery (charities originally expressed fears that the Lottery would reduce their fund-raising, but much Lottery funding has been channelled through charities).

3.1.3 The sector employs around half a million people with an estimated 3 million people undertaking unpaid work for general charities.

3.1.4 The broad definition of charities employed by the Charity Commission includes organisations such as NHS Trusts, some government funded bodies (e.g. the Arts Councils, British Council) and private schools. When these are excluded, the National Council for Voluntary Organisation's (NCVO) survey counts 135,000 charities with a turnover of some £13 billion (in 1998). We take this as the population which meets the criteria for inclusion in our study.

3.1.5 Scotland has a similar legislative framework for charities as England and Wales but there is no direct equivalent to the Charity Commission. The Scottish Charities Office estimates there are some 30,000 charities

in Scotland, with an annual income of some £3 billion. The Charities Aid Foundation estimates there are approximately 5,000 charities in Northern Ireland, although estimates vary widely.

3.2 Types of charity

3.2.1 Charities can be classified in a number of ways which may be helpful for this study, notably:

- by size and scale of operation;
- by source of funds (e.g. endowed charities vs fund-raising charities);
- by the nature of their purpose and constitution;
- by field of activity (we have used three groupings: medical/scientific; social sciences; arts and humanities).

We discuss each of these below.

Size

3.2.2 Charities range from large national and international organisations which have some of the features of major corporations, to very small local bodies which may be staffed largely by volunteers. Whilst we conducted a survey of smaller charities with research in their objects and consulted with bodies which represent them (such as ARVAC and NCVO – see Appendix A), we focused on the larger charities.

3.2.3 The table below shows a breakdown of what the Charity Commission call main charities (i.e. the lead body in each registration), by income, for 2000.

Annual income bracket (£000)	No. of main charities	% of main charities	Total annual income (£bn)	% of income of main charities
£0-1	43079	26.95	0.008	0.03
£1-10	59912	37.48	0.268	1.09
£10-100	40018	25.04	1.306	5.32
£100-250	7693	4.81	1.220	4.97
£250-1,000	5744	3.59	2.813	11.45
£1,000-10,000	3063	1.92	8.679	35.34
£10,000+	336	0.21	10.267	41.80
Total	**159845**	**100**	**24.561**	**100**

Source: Charity Commission

3.2.4 This shows that 2% of the total number of charities account for three-quarters of all income to the charitable sector.

3.2.5 Table 9 shows the top 20 charities by income. Some of these fall outside the scope of this study as defined above (e.g. the British

Council, Arts Council, Church Commissioners). In fact, only 11 of these charities fall within the scope of this report and just three are amongst the top 50 charities in terms of research spend (listed in Table 10).

3.2.6 Some of the largest charities are within the medical field and most of these are members of the Association of Medical Research Charities (see below). There are five medical charities which spend more than £10m on research. The largest of these by far is the Wellcome Trust, with an annual research (project) expenditure (i.e. projects, programmes and personal awards) of £280m in the UK in 2000. Wellcome has also made a large contribution to JIF and other capital/infrastructure schemes (shown in Table 3).

Source of funds

3.2.7 Most of the charities we considered receive their funds by two main routes: fund-raising and endowments.

3.2.8 Table 10 shows that 13 of the top 50 charities in terms of research funding are endowed, and 35 are predominantly fundraising. Although there are exceptions, endowed charities tend to have broader objects than their fund-raising counterparts, often providing funding in a number of fields of operation. The four large multi-sector charities in Table 11 are all endowed (the Leverhulme Trust, the Sainsbury family charitable trusts, the Joseph Rowntree Foundation, the Nuffield Foundation).

3.2.9 Amongst respondents to our surveys, endowed charities formed a higher proportion of charities in the areas of social sciences and policy, education, and religious and missionary.

3.2.10 A number of charities receive a significant proportion of their income from fees and subscriptions. This is particularly true in areas such as animal health, environmental charities and learned societies and institutions.

3.2.11 The Charities Aid Foundation (CAF) produces a breakdown of sources of income for the top 500 fundraising charities. This is shown in Table 11. This shows that:

- one-third of the funds of these charities come from government and other official sources;
- the smaller charities in the sample tend to be more dependent on voluntary donations than the larger charities;
- the proportion of income from grants and fees was much greater for the largest 100 charities in the sample than for the smallest 100.

The CAF analysis also highlights trends in sources of income by sector, as shown in Table 12. These include:

- charities operating in the fields of social services, children, and culture and leisure get almost half their income from grants and fees, a source of funds that is much less important for animal health and medical charities;
- both medical charities (more than a quarter) and animal health charities (two-fifths) get a significant proportion of their income from legacies, an area which barely features for international aid charities. Legacies are the single most important source of funds for animal health charities;
- voluntary donations are the single most important source of income for benevolent funds, religious, medical and international aid charities, with international aid charities particularly reliant on this income source.

Constitution and purpose

3.2.12 Charities' objects and purpose are very diverse. Whilst the AMRC has developed categories of medical research charities (profession-led; endowed; corporate; institutional; philanthropic; scientist-led), these categorisations are less relevant outside the medical field and can become complex if new categories are added to compensate.

3.2.13 For the purposes of this review, we are concerned with charities that do or may fund research. These cannot be identified directly from the Register of Charities as many charities with research in their objects may never fund research, and many who do not have research in their objects are major contributors.

3.2.14 The reasons why charities fund research vary. We could contrast:

- funding which is deliberately undirected, (e.g. the Leverhulme Trust supports high quality work in any (non-medical) field);
- those that act effectively like a Research Council – i.e. to support good basic science in a chosen field (Wellcome);
- those that fund research for social benefit (e.g. the Joseph Rowntree Foundation)
- those that do research to investigate a particular problem (the disease-specifics);
- those that only do research on an ad hoc basis when they have a particular issue;
- those that wish to benefit their chosen local or partner HEI.

3.2.15 Some charities operate in more than one of these ways. These points illustrate the range of charity support, and HEIs will be more successful if they have a better understanding of these differences and target their applications for research funding with this in mind.

3.2.16 In practice, the HE sector is primarily interested in charities which have an adequate and secure enough source of funds, and some permanent professional staff to enable them to plan and fund research; and either:

a. have research as one of their objects or are working in a field where research is likely to contribute to their charitable purposes;

b. have a particular local or other specific interest in the HEI and/or the region.

Fields of operation

3.2.17 Charities have a wide range of areas of interest and operation, which are defined differently by different bodies. As noted in chapter 2, these are dominated by the medical sciences and biosciences, but charities are also important funders of research in other fields. The most significant contribution of all charity funding of research can be grouped into three broad areas:

- medical and bio-sciences;
- social sciences and social policy;
- arts and humanities.

3.2.18 These categories are not exclusive, and a number of important players in research terms are active in more than one of them. However, each has individual characteristics which we describe below.

3.2.19 Some charity funding is in fields outside this grouping, including the physical sciences, agriculture, engineering, computer software, animal health.

3.3 Medical and biosciences research

3.3.1 Medical charities are a special case because of the size and growth of the field, as illustrated in chapter 2, and the importance of medical research to higher education, the economy, and government policy.

3.3.2 This is a high-technology and very competitive field where the UK has established an international reputation for the quality of its research. Overseas universities and research institutes, particularly in the USA, have very significant resources to devote to research in this field, and it is unlikely that the UK would still be a world player in this field without the contribution of the medical research charities, particularly the Wellcome Trust.

3.3.3 Universities have a range of alternative funders for medical and biosciences research, including the Research Councils (MRC and BBSRC), the Department of Health, and private industry (particularly pharmaceutical companies). A number of HEIs have also founded charitable trusts to support their research efforts.

3.3.4 The disciplines in this field are mature sciences which have a particular model of research which is typically characterised by:

- large research groups and collaborations;
- competitive international science;
- a premium on publication in prestige scientific journals;
- emphasis on empirical data, and often use of sophisticated technology to collect it;
- strong commercial interest from private industry;
- the potential for IPR, sponsorship etc;
- strong links to national policy objectives;
- high cost.

3.3.5 Another important, and complicating, factor is the essential link to clinical medicine and health care delivery. Much of the research in this field is carried out in collaboration with, and often in the premises of, the NHS. Universities with a medical school have a close, important, but also complex relationship with the NHS. This further complicates analysis of the financial impact of charity funded research in this field.

3.3.6 Our interviews suggested a trend amongst the specialist and disease-specific medical charities towards broadening their research remit. For example, a cancer charity might choose to spend some of its research funds on investigating the impact of the disease on the patient, friends and families. This has implications for HEIs who may need to extend inter-departmental collaboration if they are to meet changing expectations and requirements. Almost all our interviewees and focus group participants raised cross-disciplinary research teams as an important issue for them.

Medical charities and the AMRC

3.3.7 The majority of significant medical research charities are members of the Association of Medical Research Charities (AMRC). Its objects are 'to further medical research in the United Kingdom generally and in particular to advance the effectiveness of those charities of which a principal activity is medical research'. It represents members in relevant national fora and provides a collective voice and focal point for consultation. It has also played an important role in establishing common standards for the management of research funded by its members. The existence of the AMRC has meant that we have more data and understanding of this sector, as there is no comparable body for social sciences or arts charities.

3.3.8 Statistics on the research funding by members of the AMRC were given in Table 2. The AMRC handbook for the year 2001 lists annual expenditure on research in the UK by its 110 members in 1999-2000 as £540 million. The growth in research spend amongst AMRC members has been strong in recent years, increasing from £138 million in 1987-

88 and £340 million in 1995-96; almost tripling expenditure in a little over 10 years. It is thought that members' current research expenditure is likely to have levelled out at around £500m. In recent years, members have been increasing expenditure to non-research activities (e.g. campaigning, education, care and support).

3.3.9 In 1999-2000, the largest five member charities of AMRC were also the largest five charities in terms of research expenditure, as shown in Table 10. Between them, they accounted for £450 million, or 83% of members' expenditure on UK research, see table below. (These figures are different from those in Table 10, because the AMRC statistics exclude overseas spending and capital grants.)

Charity	1999-2000 UK research spend (£m)
The Wellcome Trust*	280
Imperial Cancer Research Fund	56
Cancer Research Campaign	57
British Heart Foundation	40
Arthritis Research Campaign	20

Source: AMRC Handbook 2001
Excludes Wellcome Trust funds for JIF and SRIF

3.3.10 AMRC data suggest that cancer research accounts for one-third (31%) of all medical research. General medical research accounts for 45% and heart, lung and stroke research for 12%. It remains to be seen what – if any – impact the imminent merger of the Imperial Cancer Research Fund and the Cancer Research Campaign will have on their combined research funding (estimated at some £135 million in 2000, if the ICRF's internal research funding is included).

3.3.11 HEIs receive approximately 80% of AMRC members' research spend – an estimated £400 million at current rates – with 74% spent in HEIs and 4% spent in charity units within HEIs. (The other main funding route is charity institutes, which receive 16% of funding.) This highlights the importance – to both parties – of HEIs' understanding and assimilating the particular requirements of medical research charities.

3.3.12 There are some areas of medical research where charities are funding a major part of the national research effort. For example, the Cancer Research Campaign and Imperial Cancer Research Fund between them spearheaded the introduction of oncology as an academic discipline in the 1960s. Charities still have a pre-eminent role in the funding of cancer research.

3.3.13 Examples of the importance of the medical charities include:

- medical charities dominate the list of the top 50 charities by research spend – about four-fifths of those in Table 10;
- a small number of very large funders (e.g. those listed above) can have a dramatic impact on the national research effort, and on individual HEIs;
- as noted in chapter 2, HEIs with strong medical and bioscience departments tend to get a far higher proportion of their research income from charities, and therefore have particular issues in relation to the financial impact of charity-funded research;
- peer review is well established amongst AMRC members, and most medical charity research is seen as of similar quality to that of Research Councils and as crucial to success in the RAE.

The Wellcome Trust

3.3.14 The Wellcome Trust is the pre-eminent medical charity. It is the largest single funder of medical research in the world and has played a leading role in the recent initiatives to improve university research infrastructure (JIF and SRIF).

3.3.15 The Wellcome Trust is a research-funding charity with a mission to foster and promote research with the aim of improving human and animal health. The Trust was established in the 1930s under the will of Sir Henry Wellcome. It is the largest endowed charity in the UK, with investment assets of £15bn in 2000 and an annual income of approximately £300m. The Wellcome Trust enjoyed a period of exceptional growth in funds in the mid 1990s. Table 3 provides a summary of Wellcome Trust funding for research activity and infrastructure.

3.3.16 The Wellcome Trust plays a vital role in the field of research, and has an exceptional range of grants and schemes available to UK HEIs. It has developed a strategic plan to support the Trust's mission. This is expressed in terms of four Aims of Wellcome activity. These relate to the knowledge base; resources for biomedical research; translation of research results to applications; and public engagement.

3.4 Social science and social policy research

3.4.1 Included in our definition of social science and social policy research are areas such as education, children and youth, international aid and housing. Although these areas include a number of very large charities in terms of income (e.g. Barnardos and Mencap), research often forms a small percentage of their expenditure, if it features at all.

3.4.2 By way of illustration, amongst the top 500 fundraising charities, charities in this category have a combined income that is larger than that of medical and health charities. In our top 50 charities by research spend, there are 35 fundraising charities, but only one of these, the

NSPCC, is in this field of activity (whilst there are 33 fundraising medical and health charities included). Dedicated social science/policy charities (excluding, e.g., Leverhulme and the Gannochy Trust who allocate some of their funds to the field) accounted for 2% of the research spend of our top 50 charities if Wellcome Trust is included, and 5% if it is excluded.

3.4.3 This has implications both for the way research funding is sought and for the way projects are managed and reported, as research management is likely to receive relatively less attention and resource.

3.4.4 The same cannot be said to hold true for the endowed charities providing funding for social science and social policy research. Funders such as Leverhulme, Joseph Rowntree Foundation and Nuffield Foundation all deploy research funds that are significant. Research funded by these sources tends to carry at least the same prestige as that funded by a Research Council.

3.4.5 In many ways, social science and social policy research can be more difficult to categorise than medical research, for the following reasons:

- it uses a broad range of research methodologies, both quantitative and qualitative;
- researchers may work in large teams with sophisticated equipment or as lone researchers with little more than a research assistant for support, with all the associated cost implications ;
- projects may be of global significance or of real importance to a small, local community;
- successful communication amongst the target community may be more important than gaining broader, academic recognition;
- some research may be looking to influence policy at a local, national or international level;
- whilst some projects fit well with the RAE, others may have different priorities;
- there is typically a strong bias towards application;
- peer review is stringent on some projects, whilst seen as inappropriate for others;
- surveys and desk research appear to be more important than in other research areas.

3.4.6 Perhaps because of the difficulty of defining a 'typical' social science/social policy project – and because the sector tends to sit between medical and health on the one hand and arts and humanities on the other – researchers and funders in this category seem more likely to feel that their particular needs and requirements are less well understood. For example, those working at the quantitative, 'scientific' end of the spectrum tend to feel that their research should be funded at

a level equivalent to scientific research; whilst those working on applied research projects in the community may feel that their research is undervalued.

3.4.7 The discussion in chapter 2, supported by Tables 4 and 5, illustrate the relative importance of charity funding to HEI departments in these fields.

3.4.8 There is an opportunity, which HEIs have not always been quick to recognise, for social science and social policy research funding from charities that are categorised as medical and health. Focus groups and interviews conducted in the course of this project repeatedly suggested that medical research charities are paying increasing attention to social impact. Despite the inclusion of social science topics in their areas of interest, they do not always find it easy to attract proposals in sufficient quantity or of sufficient quality.

3.5 Arts and humanities research

3.5.1 Arts and humanities is the smallest of our three categories, and does not have the same tradition of attracting externally funded research as the other two sectors. This applies to Research Council and government funding, as well as to charities' and corporate funds. In part this can be explained by the characteristics of the sector:

- historically, much of the research in this category has been viewed as highly academic with limited practical application, and has been linked to the image of a lone academic researching his or her own area of very specialist interest;
- dissemination of findings tends to be in very specialist, academic journals, or sometimes by performance, practice or other materials;
- peer review has tended to take place after publication, with current research interests sometimes a closely guarded secret outside the department;
- data are often incomplete and from different sources that are hard to compare, which can make it more difficult to validate;
- until recently with the creation of the Arts and Humanities Research Board, there was no equivalent of Research Council funding;
- external interest has tended to come from publicly funded bodies, rather than from private industry.

3.5.2 The top 50 charities by research spend contain no dedicated supporters of arts and humanities research, although the Sainsbury Family Charitable Trusts and the Leverhulme Trust are significant funders. They are certainly of significance to the sector, and Leverhulme funding is particularly highly prized for the status attached to it. The Wellcome Trust have been a long-term funder of research on the history of science.

3.5.3 There are signs of increasing interest in research in the arts and humanities sector from external funders. It should be noted that there are charities (e.g., the Arts Council) funding research who fall outside of our definition of a charity for the purposes of this study.

3.6 Charities' funding of research (Table 10)

3.6.1 Many charities spend only a fraction – if any – of their income on research, others spend the vast majority. This is highlighted in Table 10, which shows the top 50 charities in terms of research spend.

3.6.2 Table 10 has been compiled from the following sources:

- responses to our questionnaires;
- CAF's Top 500 Fundraising Charities;
- the Directory of Grant-making Trusts;
- the AMRC Handbook 2000.

3.6.3 These sources have been supplemented with telephone enquiries where necessary. It is possible that a few significant funders of research have not been included. Also, different charities inevitably have different definitions of 'research'. The figures should therefore be seen as indicative only.

3.6.4 Between them, the 50 charities in Table 10 spent some £870 million on research in 2000, or £330 million if Wellcome Trust is excluded.

3.6.5 The table below shows the percentage of top 50 research spend for our broad categories of charity, when Wellcome Trust is included and excluded. The charities have been categorised according to their principal activity, and that this does not mean that all their research funds are spent in that category.

Category	% top 50 research spend inc. Wellcome Trust	% top 50 research spend exc. Wellcome Trust
Medical & health	94	85
Social sciences & policy	2	5
Arts & humanities	0	0
Multiple & other	4	10

3.6.6 This highlights the overwhelming dominance of medical and health charities when it comes to research spend, even when the Wellcome Trust is removed from the equation.

3.6.7 The difference in share of research spend in Table 10 and share of income in Table 9 is due to medical and health charities tending to spend a far higher proportion of their income on research than charities in other sectors.

3.6.8 The figures for the top 50 charities by research spend suggest an overall increase of £360 million (70%) over the period if Wellcome Trust is included or of £50 million (18%) if it is excluded. Within this overall figure, there are some marked differences by sector, notably:

- non-medical charities have experienced a small decrease (of about £250,000) overall, with all the growth coming from medical and health charities;
- if Wellcome Trust is excluded, only £4 million (8%) of the growth has come from endowed charities – half what could have been expected from their sector share.

3.6.9 The type of research that charities are funding is also of real interest to HEIs. This is discussed in chapter 2. Table 8 provides this information for a selection of the charities in Table 10.

The future

3.6.10 A number of factors have fuelled the recent rapid growth in charity funding of research. One of these was the exceptional increase in the income of the Wellcome Trust in the mid 1990s. It is considered unlikely that the growth in research funded by charities will continue at the rates experienced in recent years. Indeed, many in the sector believe that it will reach a plateau. Among respondents to our survey of larger charities 33% expected their research spend to remain about the same; 5% expected it to increase and 6% expected it to fall. There are several factors at work here, which include:

- a perceived trend away from research towards education, support and other areas by some large funders of medical research;
- an unsettled stock market, which may have a negative impact on investment returns and encourage a cautious approach to expenditure;
- changes in tax law – notably the abolition of ACT – will reduce income on investments, and, although this is perhaps counterbalanced by other changes to tax law for many fundraising charities, endowed charities expect to see their income fall by 10 – 15%;
- a small number of charities may be considering the deployment of some research funds through overseas institutions in the future;
- some charities have experienced a negative impact on their fund-raising due to the outbreak of Foot and Mouth disease in the UK in 2001.

3.6.11 Within research itself, there is likely to be more concentration, particularly in areas of operation where expensive equipment is required, and there is likely to be a growth in multiple funding of projects (where sponsors pool their resources to get a piece of work done). This is likely to involve a growing number of projects where charities are involved alongside other funders (e.g. Research Councils), as well as other charities.

BEST COPY AVAILABLE

3.6.12 In interviews and focus groups, most larger charities stated that building longer-term relationships and funding programmes, rather than projects, will be an increasing priority.

3.7 Survey of charities

3.7.1 Research for this project included two postal surveys: the first a short questionnaire sent to 300 charities outside the top 300 and with research in their objects, the second sent to 289 of the largest charities by income and fundraising. The findings from both surveys are presented in Appendix C, and we give a summary of key points below.

Short questionnaire

3.7.2 This postal questionnaire was sent to 300 of all but the largest charities with research in their objects in February 2001. 83 questionnaires were returned (a response rate of 27%), of which 61 met the criteria for inclusion. In a telephone follow-up of a sample of non-respondents one-quarter could not be contacted; half did not fund research; and the remainder could still be classed as 'non-respondents' (the person we needed to speak to was unavailable or unwilling to participate).

3.7.3 Key findings were:

- eight out of ten responses were from fund-raising charities and over half (57%) of the questionnaires were from medical charities, with no other single area achieving more than three responses;
- medical (53%) and scientific (41%) research were the most important areas of activity, although environmental research (20%) and social sciences and policy (18%) also featured significantly;
- in total, the respondents spent some £29 million on research in 2000, with an average spend per charity funding research of nearly two-thirds of a million pounds. This supported just under 1000 projects, with an average project spend of almost £30,000;
- 18% of the respondents supported no research, whilst three out of ten spent between £10,000 and £100,000 pounds in 2000. A further three in ten spent between £100,000 and £1 million;
- peer review (56%) was the most common method of project selection, with 44% using internal assessment. One in five respondents claimed to use both;
- two-thirds of respondents funding research undertook most or all of their research in HEIs and only four respondents who funded research made no use of HEIs;
- seven out of ten respondents funding research support three to five year projects, with four out of ten supporting projects of less than one year and student or postgraduate fellowships. Overall, there was a good spread of

BEST COPY AVAILABLE

types of grant funded, with almost all charities funding research supporting more than one type;

- three in ten respondents had no concerns with the way HEIs carry out research for them, and felt that there were a wide range of benefits. The top three benefits were infrastructure/operational support (eight mentions); credibility/recognition (eight mentions); and excellent/quality research (seven mentions);
- only eight respondents specified any concerns and none of these rated more than one mention.

Top 300 questionnaire

3.7.4 A more detailed questionnaire was sent to 289 of the largest charities in April and May 2001. 106 questionnaires were returned, one of which was a composite response from charities within the same group. A further 26 respondents telephoned or sent an e-mail stating that they did not fund research. In total, the response rate was 48%.

3.7.5 A full report of findings is at Appendix C; key points are summarised below. The findings are based on analysis of the 97 questionnaires returned that were completed and which met our criteria for inclusion as a charity.

- 42% of respondents listed endowments as a main source of income, 39% named public donations/voluntary income, and 19% corporate donations. This contrasts with our earlier survey, where the majority of respondents were fund-raisers. There was also a variety of other income sources
- 42% of respondents who returned questionnaires funded no research. However, when the 26 non-questionnaire responses are included, 54% funded no research;
- research spend amongst respondents doubled between 1998 and 2000. If one very large respondent is taken out of the equation, the increase was 33%, still a strong rate of growth. However, this growth rate is not predicted to continue, with 5% of respondents saying their spend was likely to increase; 6% claiming it would decrease and 33% predicting it would remain about the same;
- excluding one very large respondent, average research spend per charity increased by 10% between 1998 and 2000, with the balance of the increase coming from an increase in the number of charities funding research;
- if the same respondent is excluded, charities predict their average research spend over the next three years will increase by 4% (6% if the respondent is included);
- medical and health, at 29%, was the most popular area for research, closely followed by social sciences and policy (25%). Scientific (19%) and nursing (10%) also reached double figures. If only those charities

funding research are included, half fund medical research and 43% fund social science and policy research;

- of respondents who completed the question on which areas of research they funded, 36% funded research in only one area, 32% in two areas, with the remainder split evenly (16% each) between those who funded research in three areas and those who funded in four or more areas;
- basic research (38%) was the most frequently funded research area, followed by applied research (34%) and desk research (26%);
- charities that funded research in HEIs (and could complete the question), averaged nearly three-quarters of their research spend in HEIs. (Only one-third of respondents completed this question);
- 12 respondents (12%) claimed to spend some of their research budget overseas, although not more than 10%. 39 respondents (40%) claimed no overseas spend;
- our respondents supported a range of project types. The most popular were projects of one to three years (41%), followed by projects of less than one year (35%) and student or postgraduate fellowships (26%);
- amongst those who completed the question, on average two-thirds of the research they sponsored in higher education was defined as collaborative. (two-thirds of these claimed either all or none of their research was collaborative.)

4 Benefits, issues and good practice

In this chapter, we summarise the main points made to us about the benefits of research relationships between charities and HEIs, and the main issues that have been raised about them. We also summarise some lessons which emerge from this material. Many of the points made in this chapter apply to research management more broadly (e.g. to all externally funded research in HEIs).

4.1 Benefits for the charity sector

4.1.1 In general, charities are satisfied with research undertaken on their behalf by HEIs and many feel there are positive benefits. HEIs are the major beneficiaries of charities' research spend, accounting for some three-quarters of total spend among respondents to our surveys.

4.1.2 This section draws from our surveys and case studies, and have been tested and validated at focus groups. However, they represent an aggregation of views expressed by individuals. Therefore not every point applies equally to all charity relationships.

Quality and credibility

4.1.3 Quality and quality control is seen as the most important benefit of working with an HEI. The term 'quality' was broadly applied, to cover the research itself, the researchers conducting it and the support team.

4.1.4 HEIs are perceived as having some of the best researchers, and these researchers are often seen to have good access to other researchers in their own and in other disciplines, encouraging cross-fertilisation of ideas. Allied to this is depth of knowledge in an institution, with good potential to become a centre of expertise.

4.1.5 Although many respondents to our surveys –particularly those with larger research spends – felt that an association with them brought prestige and kudos to the partner HEI, a number also acknowledged that the research they fund in HEIs benefits from the institution's reputation and credibility. This may be particularly true for 'issue-based' charities, where the institution's reputation for objectivity and impartiality can add weight to research findings.

Dissemination

4.1.6 Publication and 'sharing' of findings was sometimes seen as a benefit. HEIs were felt to have good access to refereed journals and other important publications. And, whilst charities might feel they could be better at disseminating research findings to users (one employs science writers to make research reports more accessible), HEIs were seen as more 'open' with research findings than some other groups (e.g. consultants and other commercial partners).

Research base

4.1.7 All the charities with larger research budgets, and most other focus group participants, attach value to continuity in a research relationship. HEIs were seen to be well-placed to provide this. This couples with a perceived trend amongst this group towards funding longer term programmes.

4.1.8 Although a number of charities expressed a concern at the decline in research infrastructure, the research infrastructure in place was seen as a benefit. As well as the facilities, this was linked to a 'research culture' and commitment to research that is not always easy to identify elsewhere.

4.1.9 Particularly among medical research charities, our research revealed a strong feeling that it is important for the UK as a whole to maintain a solid research base. Concentration of resource (by specialism and by location) is an important element in this, one which HEIs can help to fulfil. There is a feeling that by working with HEIs, charities are making a positive and distinctive contribution towards the UK's research base. Although this may be true in their collaboration with other partners, it is perhaps most obvious in the HE sector. The fact that HEIs are non-profit organisations is also important to some, and may indeed be a pre-requisite for the charity's support.

4.2 Benefits for HEIs

4.2.1 The importance of charity support for the HE sector has been covered in chapter 2 (section 2.6).

4.2.2 In summary, as well as providing another source of support alongside the Research Councils and other funders, there are specific features of charity funding which benefit HEIs in their overall research portfolio. These include:

a. charities are perceived as sometimes willing to fund work which would be unlikely to attract support from other funders like the Research Councils because (e.g.):

- it is novel or innovative in terms of research methodology;
- it does not fit easily within the Research Council structure (e.g. interdisciplinary subjects and subjects which need a broad base of research from fundamental to applied R&D);
- charities may use a wider spread of reviewers.

This perception may relate more to the past than the present, and may vary between disciplines. For example, the MRC (e.g.) actively seeks to support both innovative and interdisciplinary work.

b. charities can sometimes be more flexible in what they will fund. The

Wellcome Trust is often quoted as an example of this with their generous terms for studentships, contingency payments and so on.

c. charities are more inclined to build closer and longer-term relationships with particular institutions and researchers, who may be supported continuously over long periods. Some regional and local charities provide funding for less-research-intensive universities, often with a lower level of scrutiny and competition than industry or Research Councils, and this can be vital in helping such institutions to establish a research profile.

d. charities are widely perceived to be less bureaucratic than (e.g.) the Research Councils. This is not always a benefit in terms of quality assurance and value for money, and may sometimes reflect very lean staffing and processes because of the different sources of funds and nature of the accountability compared with a public body. However, the perception is that in many cases, it makes dealing with charities easier for HEIs.

4.2.3 Other aspects of the benefits to HEIs from undertaking charitable research include:

- the seal of approval and prestige from working with the leading charities. This is essential in certain fields – e.g. for institutions with (or about to have) a medical school, where it is a must to show biomedical Research activity, and this means having some charitable funding;
- career opportunities/retaining staff (e.g. the Wellcome Trust series of fellowships);
- local profile/networking – strengthens local links and visibility with community 'embeds the university in the community';
- a form of diversification. If an institution is not in a particular area then it might miss out – they must be in all important areas to maximise opportunities (although this is not necessarily seen as a good thing by charities who prefer HEIs to specialise);
- important source of infrastructure funding and for specialist equipment – not just Wellcome, but equipment and building grants from others (e.g. an unsuccessful JIF bid for a new centre for £250,000 was funded by a local charity);
- charities can be well-connected in their fields and provide an entry ticket for the academic into the establishment part of the policy network where research is of particular interest to policy (e.g. research into BSE, sponsored by Leverhulme; Nuffield Trust on health policy, Joseph Rowntree Foundation on social policy).

4.3 Issues and concerns

4.3.1 Although issues tend to vary from charity to charity and from sector to sector, a number of themes have emerged from our research. The

medical research charities in particular tend to raise issues particular to that sector. Some can only be addressed at a policy level, others may provide opportunities for HEIs to achieve greater added value for both charities and themselves.

4.3.2 The following should be set in the context that, for the most part, satisfaction levels around research conducted by HEIs are high.

Indirect costs and adequacy of the HE research infrastructure

4.3.3 The issue generating most comment among both charities and HEIs is that of payment of overheads. The HEIs' perspective was considered in chapter 2.

4.3.4 Almost all focus group participants and interviewees were sympathetic to HEIs' dilemma around cost recovery: they recognize that for institutions/departments – particularly those undertaking a relatively high proportion of their research for charities – non-payment of overheads can pose real problems. However, almost without exception they also agree that a requirement to pay overheads would cause them to rethink their research strategy. Fund-raising charities in particular tend to have concerns that this is not an appropriate use of funds contributed by the public, since it is seldom clear how HEIs have arrived at their overheads and what is included. Any requirement to contribute to overheads, over and above project costs that are already paid, would result in a reduction in the number and breadth of projects that could be funded. The concern here is that this work would not be picked up by other sectors – e.g., government – and so would not be undertaken.

4.3.5 The same group felt that this is a stale argument and that there is a need for charities and HEIs to discuss 'ground rules'. A number of charities have suggested that differentiating between direct and indirect costs might be a useful way forward. Whilst most felt funding indirect costs was not an option, there was more sympathy for flexibility around payment of costs that could be directly linked to undertaking a particular project. The larger funders are already contributing to 'overheads' in this way. It may be that finding a shared language and understanding is at the root of this issue.

4.3.6 Most of the larger funders we interviewed have a perception that, at least in the laboratory-based disciplines, the quality of research facilities and infrastructure is under threat. A side effect of this is that charities are asked with increasing frequency to fund what should be core equipment. Typical comments from a number of medical research charities include:

'Research facilities are downgrading rapidly... we will fund equipment, but are increasingly being asked to fund what should be core equipment.'

'We get asked for more [research equipment] and departments tend to get less

from the university... we're asked for quite a lot of stuff that may have been seen as basic in the past.'

'There seems to be a shortage of small equipment – such as computers and microscopes – in universities, and that effects productivity.'

'Research is increasingly international and highly competitive. It is increasingly difficult for universities to stay at the cutting edge. JIF funding will help but those who've not got it will be left behind.'

4.3.7 There is a perception by some charities that HEIs routinely try to 'add a computer and a technician' to every application, and charities see this as unjustifiably eroding their ability to fund research rather than infrastructure. There is something of a game going on whereby HE applicants tend to add such items (often for good reasons) and charity grant review panels tend to strike them out of applications for the equally good reasons that they wish to fund as many projects as they can.

4.3.8 The Wellcome Trust perhaps made the strongest statement on this. They have developed their own in-house research facilities, the Sanger Centre at Cambridge, and also have links to many overseas institutions. They indicate that they would seriously consider moving much of their research away from UK HEIs if they considered that this would deliver better value. Other large charities have expressed similar opinions, and stress the importance of understanding the global context.

Building and maintaining expertise

4.3.9 Over the long term, any decline in research infrastructure may also reduce the ability of UK HEIs to do the work that charities wish to fund.

'Equipment is getting more expensive and the pace of technology means you need to replace it more often... limited access doesn't encourage innovative research, it encourages predictable research.'

'If [universities] get less [research funding] it will have a significant impact on the UK's bio-medical research capacity, not just on the universities.'

4.3.10 Several participants felt that HEIs tend to do the research that they want to do and that it could be difficult to attract good applications in some areas. There was also a feeling that outside of the 'sexy' areas for research, charities have to work hard to draw researchers in.

4.3.11 Frequent funders of research tend to feel that HEIs could and should do a lot more to provide a recognised career structure for good researchers. Whilst the 'stars' generally experience few problems, there is a significant cadre of solid, experienced researchers without whom the research base could not be maintained. However, this group often seems to struggle to maintain a career when reaching the mid-

thirties. At this point many choose to leave and seek a different career. Charities point out that there is also no data on numbers who reject the idea of a research career altogether for these reasons.

4.3.12 The best researchers get snapped up quickly and there is a growing problem for HEIs in paying them and funding the gaps between projects. The feeling was that the UK is losing a lot of good researchers, particularly to the USA – which is not a bad thing (it broadens horizons) as long as they come back! The perception is that, in the USA, researchers work harder and the work is less flexible, but it is getting harder to come back 'when the jobs aren't here'. The belief is that there are no tenured positions for 'youngsters', and as a result 'there is no future for science as short term grants are no way to build a career'.

4.3.13 For medical research charities, this was allied to a perception that HEIs are also 'looking to make their fortune' and seem to be drawn more and more towards areas that may yield pharmaceutical benefits – a real problem for other areas like orthopaedics. There are already vacant chairs, and if they remain vacant they will lapse.

4.3.14 Another issue for medical research charities is animal research and the protests it generates in the UK. Some countries do not have the same problems with public perception, even though the UK has the tightest regulation in the world.

4.3.15 Some of the issues perceived by charities are reflections of a broader concern:

'There is a gap in funding of quantitative social science...[it] needs the same kind of infrastructure spending as science but is lumped with humanities that generally have lower costs.'

Additionality and matching funds

4.3.16 Given the acknowledged past under-investment in the infrastructure, both parties feel they are sometimes asked to contribute beyond the level that is appropriate. HEIs find it very difficult that they are not paid the full cost of research projects; are expected to fund their own infrastructure without the ability to make surpluses to do so; and that when a scheme to provide infrastructure is provided (like JIF and SRIF) they have to contribute a proportion of the total cost of any projects they are awarded. The effect of this may be additionality for the Treasury, but for the HEI it is substitution of funds which could have been spent on research in other areas, or on other priorities like maintenance of existing infrastructure, or staff, and these latter are therefore damaged to the extent that matching funding is directed away from them to support partially funded infrastructure awards.

4.3.17 These issues are being considered in a separate study of the university research infrastructure.

4.3.18 Medical charities regularly funding research felt that managing boundaries with what should be NHS funded research can be difficult; they are keen to ensure that their funding generates additional research, rather than replacing government funded research. A number claimed that in the past they have not funded blue skies research for this reason. However, they are being asked to fund blue skies research with increasing frequency and feel that, in some areas, it would not get done otherwise.

Impact of RAE

4.3.19 Charities involved in areas other than medical research (and particularly those working on community-based projects) suggested that the RAE was having an adverse effect on HEIs' willingness and ability to conduct some types of research, which the charities nonetheless feel is important. There was a feeling that if research does not contribute towards the RAE, departments are often unwilling to allow staff time to undertake it. In particular, projects using less formal or established research methodologies (e.g., certain types of community-based research), or which led to practical rather than published outputs, could be difficult to place.

4.3.20 There is a perception that research staff in HEIs are under increasing time pressures, and that this may lead to a decline in quality. It is felt that the volume of research, teaching and administration is increasing at a rate that is not matched by a growth in staff numbers. The high cost of equipment and a need to schedule shared use can exacerbate the problem in some fields of activity. Whilst researchers might be able to keep up with data collection and information gathering, the thinking time that is required to convert these into knowledge and wisdom is being squeezed out. For the future, it is felt by some participants that HEIs will need to improve ring-fencing of research time.

4.3.21 This lack of time can also tend to 'force researchers into a series of channels'. Whilst this is evolutionary it is not always innovative. The concern is that by adopting this approach HEIs (and the UK in general) could be missing out on the mainstream of in five to ten years.

4.3.22 A minority of charities felt there would be a price to pay in any wholesale move to research teams at the expense of lone researchers. This is not to say that research teams should not be a primary focus for resources, but rather that lone researchers also have a role. Lone researchers may find it easier to take risks, and this can result in more innovation. By contrast, some felt that research teams and the need to protect RAE scores sometimes result in an unduly cautious approach and a plethora of 'safe' projects.

Project management by HEIs

4.3.23 Standards are felt to be variable, although the general impression is

that departmental control is poor, with few formal controls.

4.3.24 Specific project management concerns included sticking to project timetables and the submission of progress reports at agreed time intervals. Annual reports and end of project reports were felt to be particularly important by charities, yet there was a feeling that on certain projects they received only limited attention. This was an area where charities tended to feel that team leaders, department heads and senior researchers could and should be offering more support to less experienced staff. Charities generally felt that project reports should not be issued until they had been read by a senior member of the department (other than the researcher) to maintain quality and integrity.

4.3.25 Project management is an area where the differences between large and experienced funders and their smaller counterparts, who perhaps fund research on an occasional basis, are very apparent. Smaller charities may be less experienced at briefing and managing research projects and at ensuring the quality of outputs. Academic researchers are not always as aware or sympathetic as they could be to this lack of experience, which can lead to mismatched expectations.

4.3.26 Several charities expressed a view that university and college finance departments are not geared toward projects, and that the accounting to research management interface was often poorly managed or even absent.

4.3.27 A particular complaint concerned timeliness of invoicing; invoicing out of a charity's accounting period can pose significant administrative problems, yet many HEIs' finance departments do not respond to requests for invoices.

4.3.28 Considerable time is spent by senior academic staff in administration. Despite the lack of bureaucracy exhibited by charitable sponsorship, two factors contribute to the administrative load:

- the very competitive bidding for some schemes (although, because of the focussed aims of many charities, charitable bids often have a higher success rate than that of the Research Councils);
- the need to constantly 'put patches on funding' to maintain a research department, and its staff's long-term employment. Unless there is a Unit or Centre (e.g. MRC, or Wellcome), there is little long-term stability in research funding.

4.3.29 Neither of these are, of course, specific to charitable work. However, both 'take away lab time and turn senior academics into project managers, rather than international researchers'.

Distortion of priorities

4.3.30 Some HEIs (chiefly Group A) claim that the level of charity support

without overheads is 'unsustainable' because of the pressures on infrastructure. For example, we have been told that a major impact of medical charity-funding of research has been to impoverish the arts and humanities departments (because the institution has had to use its uncommitted funds to provide matched funds to the medical charities).

Transparency

4.3.31 Charities are not publicly accountable bodies like Research Councils and they can rightly be more innovative and risk-taking in their approach to funding research. This is often a benefit to HEIs. However, there have been complaints that charities are less transparent than HEIs would wish, e.g. about feedback on reasons for decisions on unsuccessful applications.

4.3.32 A related point is that some small charities (such as family charities) which do not often fund research cannot be expected to have the same professional approach to the relationships as the larger ones. This inevitably causes difficulties for HEIs on some occasions.

4.3.33 There is however a corresponding benefit; some institutions have found they have been able to obtain streams of research funding with much less scrutiny and bureaucracy than would be the case with public money.

Peer review (of bids)

4.3.34 If there is a strong academic line on selection, e.g. with bids on a scheme subject to peer review, then this contributes significantly to academics' perception of the quality of the work, and its value to the HEI. Prestige is important in academic life. It helps to secure both the academics' career (e.g. future funding, future positions), and the use of their research by others.

4.3.35 Charities' policy on peer review of bidding differs. Sometimes it varies by size of award. Policies in practice include the following:

- no review;
- a review by someone who is not a researcher or from the discipline being researched; or by Trustees;
- a review by someone who has a strong background either in the profession (i.e. a health professional) or a professional research manager with considerable experience;
- review by a local researcher from that discipline;
- review by a team of researchers, perhaps from the panel of researchers used by the Research Councils for that discipline.

4.3.36 What is appropriate will depend largely upon the nature of the bid and the experience of the charity in working with researchers. Renewals

and small projects, and bids from high RAE graded research units, carry less risk. Innovative projects or methods, or those involving younger researchers, may carry more risk. However it is important not to stifle the latter with bureaucracy or even 'establishment views'. While peer review is seen as the 'Gold Standard' in Research Council-type work, it can have a detrimental effect by forcing researchers to work within current views of what research should be done. In some fields it can be difficult to find peer reviewers who take a disinterested view of the application.

4.3.37 The AMRC requires its members to use peer review in the medical research field, but in some other fields charities argue that internal assessment (with the right assessors) is equally if not more appropriate. For example, the Joseph Rowntree Foundation does not use external peer review yet is highly regarded for the quality of research it supports.

4.3.38 Whatever the mechanism used, the benefits of a proper critical review at an appropriate level are that the objectives of the research are understood by both parties, that the research bid is broadly sound, that the researchers are likely to have the appropriate skills/experience, and therefore that the project is more likely to succeed.

Review of research outputs

4.3.39 Again peer review of research outputs can be an important indication of quality. The choice of publication is important. Publications placed in refereed specialist journals – rather than, say, 'Nature' – can be considered less prestigious by academics outside that discipline.

4.3.40 The RAE has helped to add rigour to perceptions of research outputs. However, the assessment takes place some years after publication (and even longer after the work), and does not have any effect on research that is not eligible for the RAE.

4.3.41 Even many large national charities are not perceived to be strong on end-of-award reviews. Here a report could be received within (say) two months from end of project, the work could be assessed for value for money and whether the methodology was appropriate, graded satisfactory or unsatisfactory, and feedback provided to the researcher. Reference to end-of-project reviews, or insistence on publication in peer reviewed journals, might help to better inform organisations who are basing their own work (and perhaps wider policy recommendations) on sound 'evidence-based research'.

4.3.42 Some charities are strong on dissemination of research outputs, other than by publication. This often involves national news or other media launches, or less urgently, at relevant conferences. We found almost no examples of inappropriate intervention by charities encouraging academics to report early results before the research was finished, to

delay publishing (to allow a response to be prepared by the sponsor) or even to 'tell us what to say'. This can be compared favourably to some government and industrial work, where academics perceive that those pressures exist.

Planning

4.3.43 Communications between charities and researchers generally appear good, particularly once the bid has been accepted. However, a few academics have said that there may be scope for better communication at the planning stage – the link between the scheme a charity might be planning and the research academics think is important.

4.3.44 Good examples of this already exist – e.g. the heads of department annual planning meetings convened by some Research Councils, or 'road-shows' to institutions organised by Wellcome. But there still appears to be a gap between institutions and some smaller charities (not surprisingly, given their size); therefore some mechanism to share priorities may be of value.

4.3.45 Similarly, links between a particular individual's 'research strategy' and the department or institutional strategy are often not strong. This can lead to resourcing problems (e.g. on estates needs); but, more importantly, lack of strategic action in terms of the direction and strengths of a department or a discipline within an institution. For example:

- a large opportunistic bid for equipment or buildings can distort research priorities and management effort;
- potential benefits from sharing equipment or research staff knowledge are not realised;
- the subsequent use of equipment (or indeed how its maintenance and operating costs are covered post-grant) can cause problems;
- self-funded units can be isolated, and synergies from other areas and with teaching not maximised, to everyone's disadvantage;
- pressure applied by an academic on a head of department to support a fellowship can impact on the whole department, adversely in some cases;
- working with a charity can change the nature of research on some projects, and may not be the most appropriate way forward for that research.

4.3.46 These all arise when there is no assessment of the 'fit' of a project or grant with a department or wider research strategy. Such problems can be found in grants from any source, in many institutions.

Bidding processes

4.3.47 Bids to charities may be competitive in response to a request for a bid, or may be made 'cold'. Both have strengths, particularly if made in the context of a departmental strategy as discussed above. What follows is

a list of features of effective bidding processes. These are followed by many, but by no means all, charities. They do not require the intervention of 'professional' or 'research' charitable staff. They are:

- scope for iteration, between bidder and sponsor, to develop the bids to suit both sets of aims;
- 'intelligent' assessment (not just using 'tick-box' criteria);
- feeding back referees' comments, not just a short sharp rejection;
- allowing the opportunity for response to rejections;
- clear guidelines, and clear deadlines;
- a speedy turnaround of bids (or clear reasons for delays e.g. lack of availability of reviewers);
- an understanding of issues, and a focus on outcomes;
- some knowledge of research techniques, or relying on the researcher to use their professional skills in designing their methodologies – 'some small charities do not understand what it takes to do research', some lay (non-research) individuals assessing proposals may make ill-informed judgements on the method;
- a strong assessment of need for spend by the sponsor to achieve value-for-money. The history of equipment bidding and spend by institutions has not always been strong, as described by the NAO report on ESRC equipment grants, and as experienced by Wellcome. (For example, departments not following good practice in procurement, actual costs less than estimated funded costs);
- conversely, we found many examples of project-specific costs that are 'struck out' by sponsors – e.g. access to databases, attendance at conferences to publish results, reasonable consumable levels. Some charities, e.g. Wellcome, both pay all these costs and include a contingency element to help fund unforeseen but necessary extra costs. But 'nitpicking' by some charities can be detrimental to the research undertaken both directly (affecting project spend) and indirectly (by increasing pressures on researchers to find 'patches' for the spend they need to make).

4.3.48 HEIs need to be aware that some charities state that they do not respond to unsolicited bids and will not necessarily respond to unsuccessful applications. This applies particularly to charities with limited administrative support.

Monitoring/value for money (VFM)

4.3.49 Charities are perceived as having particular strengths in their supportive, 'light-touch' monitoring. Their lack of onerous paperwork and other bureaucracy compares favourably with many other sponsors. The principle of 'giving their money to high quality units and leaving us to it' has considerable benefits.

4.3.50 Grants from charities with a lower research spend may not be accompanied by any monitoring, and this may be a negative factor in terms of their potential for quality and value for money. A short annual report outlining progress and plans – and, if a local charity, an annual visit – should be the minimum that a sponsor should expect.

4.4 Summary of good practice for HEIs

4.4.1 The following is a summary of the main points in terms of good practice in development and management of research relationships between charities and HEIs. These have, to the extent practicable, been validated with individuals in charities and HEIs through the advisory group and focus groups.

Strategy and planning

4.4.2 A research strategy in place which covers:

- the reasons for doing different types of research, the costs and benefits of each;
- the balance of volume of activity between different research sponsor types which is appropriate for the institution (or for different discipline areas within the institution);
- acceptable levels of cost-recovery and subsidy for projects, and institutional policies on this.

Research infrastructure

4.4.3 Strategies in place for creating and maintaining an appropriate and sustainable infrastructure for research:

a. investment in estates, plant and equipment and other physical research infrastructure;

b. staff and career management as discussed in section 2.5 (including implementation of the research careers concordat);

c. investment in libraries, IT and information and other resources.

Client relationship management

4.4.4 Proactive management of the relationship with major research sponsors, e.g. regular meetings at senior policy level to discuss plans, priorities, opportunities, and issues of mutual concern (much of this should be bi-lateral between institutions and their particular charity partners but some could be a collaborative activity with other HEIs and charities, see below).

Project management

4.4.5 A proper framework in place for management of all significant projects

for external clients (including charities). This would include:

- institutional procedures for approval of new projects;
- local supervision/project management of delivery, quality, deadlines etc (covering areas such as writing for the audience; departmental quality assurance of written outputs; resourcing of projects);
- briefing/training for junior staff or those who are new to such work, or to the particular field or sponsor;
- integration of workload planning so that staff with a key role in external projects have the time and resources required to deliver – and know where to go for help if required.

4.4.6 Whether or not required by sponsor, it would be good practice for the HEI to initiate an annual review of progress on all significant major external projects and to produce a short report for the sponsor. The report should also be reviewed within the institution and any lessons for future work and projects noted and acted on.

Institutional framework and systems

4.4.7 Central systems should be able to provide the basic support required by all external sponsors: e.g. prompt invoicing with appropriate back-up information; provision of standard contract terms; universities policies on IPR.

4.4.8 Access by external clients to appropriate expertise within the institution should be facilitated, including interdisciplinary or cross-departmental requirements.

4.4.9 The project manager or overall academic supervisor should ensure that in addition to maintaining good relations with the client, the work done for charities is considered in terms of:

- relevance to other research groups or disciplines in the university;
- synergy with teaching or other activity which could be beneficial for the institution or the client;
- other non-financial benefits.

and that these opportunities are reported and pursued within the institution.

Costing and pricing

4.4.10 Institutions should adopt more transparent and business-like procedures for costing and for negotiating prices with sponsors. The key point is to improve clarity about what costs are essential to the project but not over-specifying as a means to cover more general requirements.

4.5 Good practice for charities

4.5.1 Charities should work with the HE sector to plan and discuss opportunities, trends and priorities for research. At a collective level they should hold a regular strategy meeting to discuss new areas for research, as well as gaps and problems needing research attention. This is also valuable between individual charities and HEIs where there is a large volume of work.

4.5.2 There should be clear communication and information from charities to HEIs – i.e. publicity about charities' research interests, what they will and will not fund; whether they respond to unsolicited applications; the audiences for their research; their procedures for selection etc.

4.5.3 Charities should recognise the academic imperatives for institutions and the legitimacy of respecting these when the major part of infrastructure costs are being met by the HE sector, not the charity. Particular issues here relate to use of appropriate research methodologies; publication rights; and the use of peer review and other appropriate quality assurance mechanisms.

4.5.4 They should carry out realistic negotiations with HEIs, recognising that the research methodology and the level of resource required to do the work cannot necessarily be adjusted to reduce costs without threatening the objectives of the project.

4.5.5 Charities should follow good process on responding to applications: transparency, timeliness, feedback to HEIs (within the policy of the charity as announced in its publicity).

4.5.6 There should be clarity of contract terms, especially around IPR.

4.5.7 During the project there should be:

- regular review and discussions;
- acceptance of the need for flexibility to adapt to progress achieved;
- site visits where appropriate.

4.5.8 There should be an end of project review.

4.5.9 Charities should recognise the mutual interest in preserving and maintaining a sustainable UK higher education infrastructure for research, and respect the legitimate needs of research staff funded through short-term contracts for some career stability. As a consequence, they should be willing to pay the full direct cost of projects, and, where appropriate, to make a contribution to the infrastructure that will benefit the charity sector as well as the HE sector in future.

Glossary

AMRC	Association of Medical Research Charities
blue skies research	part of 'institution-/own-funded research' which is theoretically funded as part of the QR funding stream, i.e. has no external sponsor
charity	(in this report) as defined in chapter 3
DfES	Department for Education and Skills
direct costs	expenditure which can be identified with and specifically measured with respect to a particular project. This includes the additional (marginal) costs of research staff employed for a project, equipment purchased for that project, consumables consumed for the purposes of that project, IT usage etc; and costs of other resources in the institution that can be identified with and measured with respect to a project – e.g., the time of technicians and permanent investigators
DTi	Department of Trade and Industry
dual support	a term used to describe the nature of research funding in UK HE. The Research Councils pay direct project costs and give institutions a percentage of direct staff costs (currently 46%), as a contribution toward indirect and infrastructure costs. This is matched by monies awarded through the funding councils' block grants to institutions. The significant part of the funding council funding is awarded through QR
eligible costs	expenditure which a sponsor will fund on a particular project. This term is often used to apply only to marginal costs, and as such does not include all direct costs. It might include some indirect costs (e.g. on Research Council and EU contracts)
full costs	the full economic costs of an activity or project. This is the total of direct costs and indirect costs, and the inclusion of economic charges for an appropriate share of infrastructure and capital
HEFCE	Higher Education Funding Council for England
HEIs	higher education institutions, comprising universities and colleges of higher education
indirect costs	expenditure which cannot be identified with a specific project or activity. The term 'overheads' has often been used for indirect costs but is not used in this report. The terms indirect costs and Support costs can be used synonymously
infrastructure	generally used to mean the physical infrastructure of an institution – buildings, mechanical and electrical services, equipment, IT, libraries – but is often extended to include staffing associated with these areas, and to include the management and administration of an institution
IPR	intellectual property rights
IT	information technology, synonymous in this report with information and communication technology (ICT)
JIF	Joint Infrastructure Fund, a funding initiative sponsored by the Wellcome Trust and the Government, which is providing £750m to HE institutions towards their science research infrastructure

NCVO	National Council for Voluntary Organisations
NHS R&D	the research and development programme of the NHS
Other	a term used to describe all primary activities in an institution other than Research or Teaching, as defined under the Transparency Review (it is distinct from Support under the Transparency Review)
OST	Office of Science and Technology
overheads	see indirect costs
PI	Principal investigator, the supervisor or lead researcher on research projects, generally a permanent member of HEI staff
QR	quality-rated element of HEFCE's research funding – over 90% of research funding allocated by the funding councils is distributed selectively, according to the quality of research measured. This QR element is allocated to institutions on the basis of research volume * quality * cost weighting. Volume and quality are assessed through the RAE. Part of the volume element is also allocated to institutions on the volume of their charity-funded research. Other elements of HEFCE research funding not covered in this report are the QR elements that relate to the supervision of research students and to London weighting, and GR funding (generic research) which recognises collaborative research that does not have a single beneficiary. (GR funding is discontinued after 2001-02)
R	Research, a term used to describe all research activity as defined under the Transparency Review
RAE	Research Assessment Exercise, a periodic assessment of the volume and quality of research, undertaken by HEFCE. The staff working in each field (Unit of Assessment) in an institution are then awarded a 'rating': 3b, 3a, 4, 5, 5* (with groups awarded 5 and 5* undertaking research of international standing). The results of the latest RAE will be published in December 2001
Research Councils	EPSRC, PPARC, BBRSC, MRC, NERC and ESRC. In this report the term incorporates the AHRB.
SHEFC	Scottish Higher Education Funding Council
SRIF	Science Research Infrastructure Fund, a second funding initiative sponsored by the Wellcome Trust and the Government which is providing a further £1 billion (in addition to JIF) to HE institutions towards their science research infrastructure
Support	Indirect costs
T	Teaching, A term used to describe all teaching activity, as defined by the Transparency Review
Transparency Review	as part of the sector's accountability to Government, and to enhance their internal costing information, every institution is reporting annually to Government the costs of Teaching (T), Research (R) and Other (O). T and R are categorised into publicly funded activities (PF) and non-publicly funded activities (NPF). The information is being prepared in a robust way according to a detailed methodology established by the Joint Costing and Pricing Steering Group (JCPSG July 2000: Transparent Approach to Costing). This required all academics to complete time allocation schedules; for indirect cost rates to be established on a consistent and auditable basis;

	and for the reported costs to include 'cost adjustments' relating to cost of capital employed (COCE) and an infrastructure adjustment
well-found laboratory	the basic items of research infrastructure, generally discipline-specific, which are used for a number of projects in one or more fields across one or more disciplines. The term covers equipment, technician and administrative support, maintenance contracts etc. A well-found laboratory, together with a 'well-found institutional infrastructure', is part of the indirect costs of a project. The equipment may be state-of-the-art, or of a lesser functionality, depending on the needs of the range of research projects undertaken in those fields. It would include large and costly items, as well as more basic, less costly, items of equipment
UGC	Universities Grants Committee, predecessor to UFC and then HEFCE, SHEFC et al
universities	the term universities in this report is deemed to cover both universities and colleges of higher education
UUK	Universities UK. The term UUK in this report is deemed to cover both Universities UK and SCOP (Standing Conference of Principals of Colleges of Higher Education)

Appendix A
Study method and sources of information

Terms of reference

The main requirements of the review were to:

- map the existing research-related links between the charity and HE sectors;
- identify those links with the greatest potential for development;
- recommend ways these could be developed;
- assess the financial implications;
- compare with overseas experience and practice.

Within this remit, there were a number of areas requiring special attention which included:

- intellectual property;
- career opportunities within HE for charity-sponsored staff;
- development of best practice guidelines for major types of interaction.

Advisory group

The following were members of the Advisory Group for the study:

John Rushforth	HEFCE
Diana Garnham	AMRC
Jonathan Grant	Wellcome Trust
Andrew Passey	NCVO
Janet Lewis	Joseph Rowntree Foundation
Sharon Witherspoon	Nuffield Foundation
Professor Tony Crook	University of Sheffield
Professor Graham Bentham	University of East Anglia
Patricia Ambrose	SCOP

Visits and case studies

Meetings were held with the following organisations and institutions.

Charities sector

Arthritis Research Campaign
British Heart Foundation

Cancer Research Campaign
Capability Scotland
Cystic Fibrosis Trust
Imperial Cancer Research Fund
Leverhulme Trust
Lister Institute of Preventive Medicine
National Kidney Research Fund
Nuffield Foundation
Nuffield Trust
Joseph Rowntree Foundation
Wellcome Trust
Wishbone

Association of Charitable Foundations (ACF)
Association of Medical Research Charities (AMRC)
Charities Aid Foundation (CAF)
National Council for Voluntary Organisations (NCVO)
Association for Research in the Voluntary and Community Sector (ARVAC)

Focus groups were also formed with representatives of the charities sector.

HE sector

Imperial College
University College London (UCL)
University of Birmingham
University of Sheffield
University of Leicester
Liverpool John Moores University
University of Sussex
University of Warwick
University of East Anglia

Other groups and organisations

Medical Research Council
Universities UK
Council of Heads of Medical Schools
Joint Medical Advisory Committee
Standing Conference of Principals (SCOP) Research Committee

Appendix B
Statistics on charity funded research in higher education

Table 1 Growth and volume of Research activity

Table 2 Funding by medical charities

Table 2b AMRC charities expenditure 1999-2000

Table 3 The Wellcome Trust: funding for infrastructure and other purposes

Table 4 The range of disciplines supported by charitable and all Research funding

Table 5 The range of disciplines or fields supported

Table 6 The top ten Units of Assessment

Table 7 Charity and other research funding by institution (1998-99)

Table 8 Charity Research funding by type of grant (incomplete)

Table 9 The top 20 charities by income – England and Wales

Table 10 The top 50 charities by research spend

Table 11 CAF sources of income for fundraising charities

Table 12 CAF sources of income for fundraising charities by field of operation

Appendix B
Tables of statistics on charity-funded research in higher education

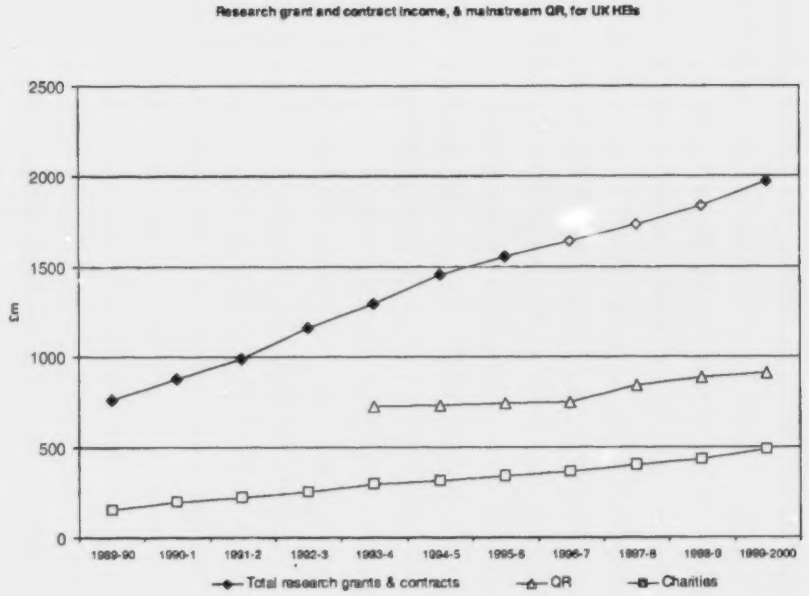
Table 1 **Growth and volume of research activity**

£m	1989-90	1990-91	1991-92	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-2000
England:											
UK-based charities	132	166	191	214	254	268	290	310	338	357	401
OST Research Councils			247	330	378	416	446	439	445	466	504
total res grants and contracts	619	704	802	946	1,071	1,201	1,294	1,366	1,431	1,505	1,614
charitable funding as % total	21%	24%	24%	23%	23%	22%	22%	23%	24%	24%	25%
number of institutions reporting	*36*	*36*	*118*	*119*	*116*	*142*	*146*	*140*	*137*	*136*	*134*
UK											
UK-based charities	156	195	223	251	297	313	338	364	399	429	484
Total res grants and contracts	763	876	987	1,162	1,298	1,453	1,554	1,642	1,734	1,835	1,973
charitable funding as % total	20%	22%	23%	22%	23%	22%	22%	22%	23%	23%	25%
number of institutions reporting	*53*	*53*	*135*	*136*	*133*	*181*	*185*	*178*	*175*	*172*	*169*
UK											
Total institutional income	4,040	4,421	6,893	7,740	8,573	10,039	10,711	11,143	11,617	12,113	12,769
charitable funding as % total	4%	4%	3%	3%	3%	3%	3%	3%	3%	4%	4%
QR: England *	432	497	565	563	585	590	600	600	684	714	738
QR: UK					727	734	746	749	841	885	912

Sources: *HESA FSR 1994-95 to 1999-2000 UFC USR 1989-90 to 1993-94 Former PCFC Finance Record 1991-92 to 1993-94*
QR figures from HEFCE, WFC and SHEFC – main formula recurrent research grant (based on the RAE) allocated each year to the HE sector generally excluding initiative funding streams, or Contract Research funding. Excluding QR for supervision of research students and London extra costs (approx £90m, HEFCE).

** QR prior to 1993-94 includes all R funds, not just quality-related; in 1997-98 there was a £50m transfer from formula capital.*

BEST COPY AVAILABLE



BEST COPY AVAILABLE

Table 2 Funding by medical charities

	Total expenditure (£)	Founder members
1984-85	86,797,492	86,797,492
1985-86	108,809,361	107,959,361
1986-87	110,201,685	104,338,205
1987-88	138,317,982	129,561,926
1998-99	148,865,570	141,205,173
1989-90	177,271,673	165,989,218
1990-91	215,812,901	197,386,952
1991-92	251,279,342	225,720,048
1992-93	269,493,323	239,517,257
1993-94	317,551,176	284,997,054
1994-95	360,759,352	327,536,649
1995-96	341,166,350	308,043,895
1996-97	417,919,725	379,723,870
1997-98	414,378,059	373,247,958
1998-99	418,320,167	256,169,936
1999-2000	552,392,383	498,218,925

Source: AMRC

BEST COPY AVAILABLE

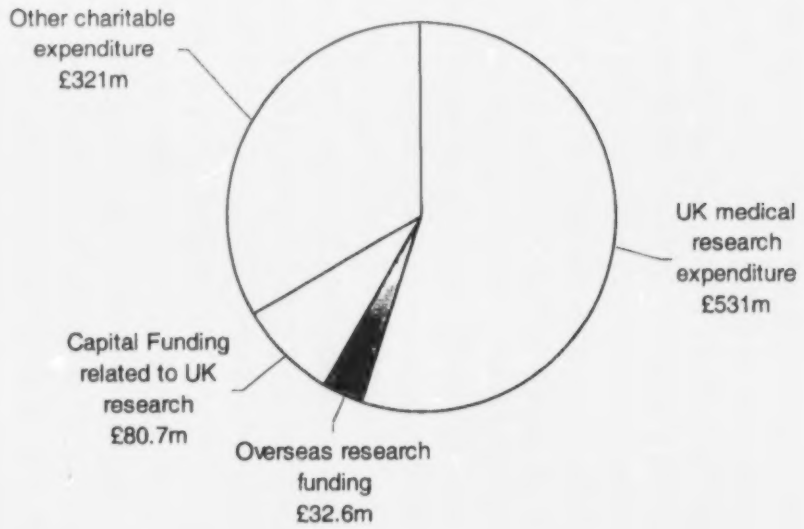
Table 2b AMRC charities expenditure 1999-2000

	UK Medical Research Expenditure	Non-UK Research Funding	Capital Funding related to UK medical research	Other Charitable Expenditure	Total Charitable Expenditure
Total expenditure by AMRC member charities	531,701,330	32,614,126	80,704,755	321,236,469	966,256,680
Analysis by type of charity					
Endowed charities	295,490,516	30,249,620	54,475,000	80,310,825	460,525,961
Fundraising charities	236,210,814	2,364,506	26,229,755	240,925,644	505,730,719
Total	**531,701,330**	**32,614,126**	**80,704,755**	**321,236,469**	**966,256,680**
Charities that mainly or only support medical research	494,287,385	32,087,565	80,495,626	37,523,125	644,393,701
Multifunctional charities (research, care, support)	37,413,945	526,561	209,129	283,713,344	321,862,979
Total	**531,701,330**	**32,614,126**	**80,704,755**	**321,236,469**	**966,256,680**

Source: AMRC

BEST COPY AVAILABLE

AMRC charities expenditure 1999-2000


Other charitable expenditure £321m
UK medical research expenditure £531m
Capital Funding related to UK research £80.7m
Overseas research funding £32.6m

BEST COPY AVAILABLE

Table 3 **The Wellcome Trust: funding for infrastructure and other purposes**

	Grant Name	1996	1997	1998	1999	2000	Total	% of total
INFRASTRUCTURE	Joint Infrastructure Grant				17,450,856	115,873,355	133,324,211	10
	Research Institutes	61,881,424	2,315,000	0	1,514,864		65,711,288	5
	Equipment Grants	6,992,219	17,408,388	7,504,062	14,974,120	5,510,180	52,388,969	4
	Buildings Grants	14,224,008	15,913,369	4,961,044	12,959,092	160,000	48,217,513	4
	Wellcome Trust Centres				2,077,767	23,515,058	25,592,825	2
	Clinical Research Facilities				18,485,292	616,229	19,101,521	2
	Synchrotron Access					4,350,000	4,350,000	0
subtotal infrastructure		83,097,651	35,636,757	12,465,106	67,461,991	150,024,822	348,686,327	27
KNOWLEDGE-BASED	Project Grants (UK only)	48,907,775	59,190,283	58,968,825	71,751,633	89,068,977	327,887,493	26
	Programme Grants (UK only)	26,127,443	35,280,846	28,637,068	48,232,986	81,698,092	219,976,435	17
	Personal Awards (UK only)	57,944,053	62,023,857	62,594,739	82,609,488	109,339,546	374,511,683	29
subtotal knowledge-based		132,979,271	156,494,986	150,200,632	202,594,107	280,106,615	922,375,611	
	TOTAL	216,076,922	192,131,743	162,665,738	270,056,098	430,131,437	1,271,061,938	

Source: The Wellcome Trust

These totals are the expenditure for each of the grant types shown, there is other expenditure not shown in this table.

project grants: to provide funding for projects, normally for three years
programme grants: to provide support for up to five years for extensive or long-term research
personal awards: fellowships, often including project or programme grant support

BEST COPY AVAILABLE

Table 4 The range of disciplines supported by charitable and all research funding

UK 1998-9
Figures in £000s

Cost centre (discipline)	Source of income: c1 OST Research Councils	c5 EU gov't	c3 UK government etc	c6+c7+c4+c8 Other excl charities	Total excluding charities	c2 UK-based charities	Total including charities	Charities as a % of total
1 Clinical medicine	76,809	15,455	99,461	104,582	296,307	227,451	523,758	43
2 Clinical dentistry	1,036	731	3,355	3,252	8,374	3,344	11,718	29
3 Veterinary science	4,295	1,262	6,477	4,015	16,049	9,525	25,574	37
4 Anatomy and physiology	9,082	1,888	1,232	4,955	17,157	22,954	40,111	57
5 Nursing and paramedical studies	372	1,033	7,428	1,537	10,370	1,678	12,048	14
6 Health and community studies	1,401	544	10,393	1,297	13,635	2,274	15,909	14
7 Psychology and behavioural sciences	12,374	1,539	5,426	4,279	23,618	7,902	31,520	25
8 Pharmacy	3,007	671	2,134	8,434	14,246	6,122	20,368	30
9 Pharmacology	2,922	573	1,193	5,625	10,313	10,209	20,522	50
10 Biosciences	95,992	19,966	23,660	37,400	177,018	88,052	265,070	33
11 Chemistry	45,584	8,954	6,952	24,546	86,036	7,812	93,848	8
12 Physics	87,683	6,786	8,039	9,023	111,531	4,025	115,556	3
13 Agriculture and forestry	4,058	5,853	18,536	9,866	38,313	859	39,172	2
14 Earth, marine and environmental sciences	19,172	7,842	6,953	13,340	47,307	1,677	48,984	3
15 General sciences	31	267	296	341	935	26	961	3
16 General engineering	15,937	5,808	8,099	15,807	45,651	1,139	46,790	2
17 Chemical engineering	12,429	2,289	962	4,874	20,554	312	20,866	1
18 Mineral, metallurgy and materials engineering	17,926	2,931	3,281	11,837	35,975	883	36,858	2
19 Civil engineering	10,077	4,242	5,093	5,622	25,034	353	25,387	1
20 Electrical, electronic and computer engineering	38,504	12,032	8,438	19,303	78,277	811	79,088	1
21 Mechanical, aero and production engineering	23,230	11,297	10,738	26,524	71,789	1,172	72,961	2
22 Other technologies	51	2	0	95	148	5	153	3
23 Architecture, built environment and planning	3,744	2,806	6,367	4,422	17,339	1,192	18,531	6
24 Mathematics	11,518	3,964	2,630	3,671	21,783	1,150	22,933	5
25 Information technology and systems sciences	6,697	3,484	1,428	2,479	14,088	248	14,336	2

Cost centre (discipline)	Source of income c1 OST Research Councils	c5 EU gov't	c3 UK government etc	c6+c7+c4+c8 Other excl charities	Total excluding charities	c2 UK-based charities	Total including charities	Charities as a % of total
26 Catering and hospitality management	25	65	263	296	649	8	657	1
27 Business and management studies	7,391	4,450	8,003	14,440	34,284	2,114	36,398	6
28 Geography	4,865	3,725	5,027	3,154	16,771	1,656	18,427	9
29 Social studies	18,801	8,620	26,971	10,274	64,666	8,766	73,432	12
30 Librarianship, communication and media studies	428	370	478	529	1,805	220	2,025	11
31 Language based studies	2,308	385	425	674	3,792	1,129	4,921	23
32 Humanities	3,289	570	2,782	2,385	9,026	4,774	13,800	35
33 Design and creative arts	788	1,190	645	2,259	4,882	1,048	5,930	18
34 Education	3,862	2,581	14,135	2,681	23,259	4,783	28,042	17
35 French, Spanish and German modern languages	384	50	265	63	762	207	969	21
36 Other modern languages	242	231	97	79	649	73	722	10
37 Archaeology	657	224	1,387	2,342	4,610	1,140	5,750	20
38 Sports science and leisure studies	31	26	507	1,020	1,584	508	2,092	24
39 Computer software engineering	10,596	6,785	1,904	5,842	25,127	457	25,584	2
41 Continuing education	99	320	611	283	1,313	224	1,537	15
TOTAL ACADEMIC DEPARTMENTS	557,697	151,811	312,071	373,447	1,395,026	428,282	1,823,308	23
TOTAL NON-ACADEMIC SERVICES	1,909	881	4,342	522	3,624	151	11,429	1
TOTAL RESEARCH GRANTS AND CONTRACTS	559,606	152,692	316,413	373,969	1,398,650	428,433	1,834,737	23

Source: HESA FSR 1998-99, Table 4 Research grants and contracts

BEST COPY AVAILABLE

Table 5 The range of disciplines or fields supported

England Four years to 1998-9

Disciplines	UoA number	£000 charitable income p.a. 1995-6	1996-7	1997-8	1998-9	% 1998-9
Medical	1-9	200,178	212,682	231,530	245,372	69
Nursing and PAMs	10-11	3,140	3,010	3,264	3,899	1
Scientific	12-16, 18-32	62,868	68,902	73,656	78,123	22
Social Sci & Policy	33-44	9,233	10,451	10,953	11,599	3
Arts & Humanities	45-67	7,239	7,614	7,555	7,727	2
Animal Health	17	3,222	3,605	3,847	4,095	1
Education	68	3,781	4,272	3,963	4,875	1
Other	36, 69	1,385	1,356	1,654	1,392	0
Total		291,047	311,891	336,421	357,082	100

Discipline Groupings	UoA number	£000 charitable income p.a. 1995-6	1996-7	1997-8	1998-9	% 1998-9
Medicine and Science	1-32	269,408	288,199	312,297	331,489	93%
Social Sciences	33-44, 68-69	10,618	11,807	12,606	12,991	4%
Arts and Humanities	45-67	11,021	11,886	11,518	12,602	4%
Total		291,047	311,891	336,421	357,082	100%

Source: HEFCE Research Activity Surveys (HEFCE analytical services)

Table 6 The top ten Units of Assessment

England Four year average to 1998-9

Top grossing UoAs	UoA	4 yr average (to 1998-9) £000s	% of total funding
Hospital-Based Clinical Subjects	3	110,602	34%
Clinical Laboratory Sciences	1	43,744	13%
Biological Sciences	14	34,008	10%
Community Based Clinical Subjects	2	20,159	6%
Biochemistry	12	18,329	6%
Pre-Clinical Studies	5	12,764	4%
Physiology	7	10,504	3%
Pharmacology	8	9,791	3%
Anatomy	6	6,407	2%
Pharmacy	9	5,953	2%
Total of top ten		272,262	
% of total funding			84%

Source: HEFCE Research Activity Surveys (HEFCE analytical services)

able 7 Charity and other research funding by institution (1998-99)

ource Analysis of charitable income by UoA – HEFCE Research Activity Surveys (HEFCE analytical services)
Total charity and research funding, and breakdown of total research funding by cost centre – HESA FSR

998-9 £000s

Multi-faculty institutions with medical schools

	Research grants and contracts income (all sources) by discipline group				% by discipline group			Charitable research grants and contracts income by discipline group (England only)				% by discipline group			
	Medicine and Science £000s	Social Sciences £000s	Arts and Humanities £000s	Total £000s	Med and Science %	Social Sciences %	Arts and Humanities %	Medicine and Science £000s	Social Sciences £000s	Arts and Humanities £000s	Total £000s	Income as % res inc	Med and Science %	Social Sciences %	Arts and Humanities %
University of Aberdeen	20,858	737	599	22,194	94%	3%	3%	Not avail			8,728	30%			
Queens University Belfast	19,036	869	646	20,551	93%	4%	3%	Not avail			3,787	18%			
University of Birmingham	46,132	4,501	1,673	52,306	88%	9%	3%	10,506	412	306	11,224	21%	94%	4%	3%
University of Bristol	41,874	873	162	42,909	98%	2%	0%	11,320	942	139	12,401	29%	91%	8%	1%
University of Cambridge	102,169	4,250	2,551	108,970	94%	4%	2%	28,998	856	562	30,416	28%	95%	3%	2%
University of Dundee	26,947	237	67	27,251	99%	1%	0%	Not avail			10,953	40%			
University of Edinburgh	61,000	2,725	2,092	65,817	93%	4%	3%	Not avail			17,962	27%			
University of Glasgow	51,389	2,534	367	54,290	95%	5%	1%	Not avail			17,708	33%			
Imperial College of Sci, Tech and Med	123,210	1,041	61	124,312	99%	1%	0%	32,235	-	61	32,296	26%	100%	0%	0%
Kings College London	73,769	3,120	698	77,587	95%	4%	1%	26,046	254	532	26,832	35%	97%	1%	2%
University of Leeds	48,067	2,247	784	51,098	94%	4%	2%	12,082	365	111	12,558	25%	96%	3%	1%
University of Liverpool	34,827	1,172	897	36,896	94%	3%	2%	8,984	93	178	9,255	25%	97%	1%	2%
University of Leicester	26,057	907	299	27,273	96%	3%	1%	6,932	180	313	7,424	27%	93%	2%	4%
University of Manchester	52,130	5,307	894	58,331	89%	9%	2%	14,217	292	622	15,131	26%	94%	2%	4%
University of Nottingham	37,693	2,944	931	41,568	91%	7%	2%	5,896	282	341	6,518	16%	90%	4%	5%
University of Newcastle	36,136	2,492	252	38,880	93%	6%	1%	10,292	166	302	10,761	28%	96%	2%	3%
University of Oxford	111,878	4,107	1,770	117,755	95%	3%	2%	37,869	595	820	39,284	33%	96%	2%	2%
University of Sheffield	41,693	2,130	1,846	45,669	91%	5%	4%	8,690	328	393	9,411	21%	92%	3%	4%
University of St Andrews	10,807	264	812	11,883	91%	2%	7%	Not avail			1,797	15%			
University of Southampton	45,903	1,111	358	47,372	97%	2%	1%	6,557	62	107	8,727	14%	97%	1%	2%
University College London	120,994	3,748	1,452	126,194	96%	3%	1%	50,314	444	560	51,319	41%	98%	1%	1%
	1,132,579	47,316	19,211	1,199,106	94%	4%	2%	270,938	5,273	5,348	281,558	23%	96%	2%	2%
										(UK)	340,503				

Next 20 institutions with significant research income

	Research grants and contracts income (all sources) by discipline group				% in each discipline group			Charitable research grants and contracts income by discipline group (England only)				% by discipline group			
	Medicine and Science £000s	Social Sciences £000s	Arts and Humanities £000s	Total £000s	Med and Science %	Social Sciences %	Arts and Humanities %	Medicine and Science £000s	Social Sciences £000s	Arts and Humanities £000s	Total £000s	charitable income as % res inc	Med and Science %	Social Sciences %	Arts and Humanities %
Cranfield University	28,029	1,319	8	29,356	95%	4%	0%	100	49	-	148	1%	67%	33%	0%
Queen Mary and Westfield College	25,370	171	106	25,647	99%	1%	0%	8,990	53	53	9,097	35%	99%	1%	1%
University of Warwick	17,477	7,084	616	25,177	69%	28%	2%	1,717	1,717	1,717	5,150	20%	33%	33%	33%
University of York	18,275	5,744	512	22,531	72%	25%	2%	2,598	703	250	3,552	16%	73%	20%	7%
Cardiff University	17,264	3,813	554	21,431	81%	17%	3%	Not avail			2,402	11%			
University of Strathclyde	17,274	3,177	280	20,731	83%	15%	1%	Not avail			2,183	11%			
University of Durham	13,238	4,756	702	18,696	71%	25%	4%	894	223	360	1,478	8%	61%	15%	24%
Loughborough University	14,002	3,291	541	17,834	79%	18%	3%	265	406	10	681	4%	39%	60%	1%
University of Reading	16,208	1,244	333	17,785	91%	7%	2%	957	73	111	1,140	6%	84%	6%	10%
University of Surrey	16,433	805	284	17,522	94%	5%	2%	662	58	136	857	5%	77%	7%	16%
UMIST	16,094	1,021	0	17,115	94%	6%	0%	890	102	-	991	6%	90%	10%	0%
University of Bath	13,628	2,117	169	15,914	86%	13%	1%	2,430	118	38	2,586	16%	94%	5%	1%
London School of Hygiene and Tropic	15,800	0	0	15,800	100%	0%	0%	4,008	-	-	4,008	25%	100%	0%	0%
University of Sussex	11,463	3,719	236	15,418	74%	24%	2%	1,521	185	77	1,782	12%	85%	10%	4%
St Georges Hospital Medical School	13,271	0	0	13,271	100%	0%	0%	7,087	-	-	7,087	53%	100%	0%	0%
University of East Anglia	12,171	473	590	13,234	92%	4%	4%	2,214	131	379	2,725	21%	81%	5%	14%
University of Wales, College of Medici	13,007	0	0	13,007	100%	0%	0%	Not avail			4,851	37%			
Lancaster University	7,894	2,005	1,059	10,958	72%	18%	10%	652	137	123	912	8%	72%	15%	13%
University of Greenwich	10,113	388	41	10,542	96%	4%	0%	100	28	-	128	1%	78%	22%	0%
University of Exeter	7,845	1,574	289	9,508	80%	17%	3%	1,252	160	484	1,896	20%	66%	8%	26%
	302,656	42,501	6,320	351,477	86%	12%	2%	36,337	4,142	3,739	44,218	13%	82%	9%	8%
										(UK)	53,654				
All other institutions															
88 other institutions (England only)	136,670	58,258	16,411	211,339	65%	28%	8%	24,216	3,576	3,515	31,306	15%	77%	11%	11%
13 Scotland				44,752							30,392	68%			
12 Wales				41,552							2,066	5%			
1 Northern Ireland				8,941							838	9%			

BEST COPY AVAILABLE

Table 8 Charity research funding by type of grant (illustrative)

Organisation	% projects & programmes *	% people *	% solely buildings & equipment	% non-HEI	% not specified
Charity A	56	8	1	28	7
Charity B		100			
Charity C	34	7	?	39	20
Charity D	45	25	28	2	-
Charity E	40	25	35	n/k	-
Charity F	61	3	?	36	0

* Project and programmes figures, and the people figures include buildings and equipment.

Source: Annual Reports; JMC Research

Table 9 Top 20 charities by income – England and Wales

Rank	Charity	1999-2000 income (£m)
1	British Council	430
2	Wellcome Trust	311
3	Arts Council of England	238
4	Victoria and Albert Museum	221
5	Nuffield Nursing Homes Trust	216
6	National Trust	192
7	Charities Aid Foundation	181
8	Anchor Trust	168
9	Oxfam	158
10	Church Commissioners for England	152
11	British Red Cross Society	150
12	Barnardo's	116
13	Imperial Cancer Research Fund	114
14	British Library	112
15	Construction Industry Training Board	112
16	Notting Hill Housing Group	106
17	R S for Mentally Handicapped Children & Adult	101
18	Royal National Lifeboat Institution	101
19	British Heart Foundation	100
20	Save the Children Fund	97

Source: www.charitiesdirect.com (Caritas data)

Table 10 The top 50 charities by research spend

Rank	Charity	1997-8 Research (£000s)	1997-8 Income (£000s)	Research % of income	2000 Research (£000s)	Field of activity	Type of charity
1	Wellcome Trust*°	230,000	311,000	74	540,000	Medical	Endowed
2	Imperial Cancer Res Fund~	55,000	100,128	55	69,000	Medical	Fundraising
3	Cancer Research Campaign#	51,000	81,544	63	61,000	Medical	Fundraising
4	British Heart Foundation*	39,400	82,562	48	40,100	Medical	Fundraising
5	Arthritis Research Campaign#	16,858	19,132	88	*16,858*	Medical	Fundraising
6	The Leverhulme Trust	15,953	20,800	77	*15,953*	Multiple	Endowed
7	The Sainsbury Family Char Trusts*	10,000	50,200	20	10,000	Multiple	Endowed
8	Leukaemia Research Fund#	8,000	14,342	56	*8,000*	Medical	Fundraising
9	Joseph Rowntree Foundation*a	6,500	9,630	67	6,100	General Welfare	Endowed
10	Nuffield Foundation*a	6,817	8,920	76	*6,817*	Multiple	Endowed
11	Diabetes UK*~	4,520	13,898	33	*4,520*	Medical	Fundraising
12	Action Research~	4,216	4,618	91	*4,216*	Medical	Fundraising
13	Multiple Sclerosis Society*~	4,071	31,219	19	1,602	Medical	Fundraising
14	Yorkshire Cancer Research#	2,961	4,125	72	*2,961*	Medical	Fundraising
15	Assn for Int. Cancer Research*~	5,000	6,220	80	7,000	Medical	Fundraising
16	National Asthma Campaign*~	2,700	6,038	45	3,900	Medical	Fundraising
17	PPP Healthcare Medical Trust	2,430	25,000	10	6,470	Medical	Endowed
18	Dunhill Medical Trust	2,400			2,300	Medical	Endowed
19	Marie Curie Research Institute#	2,139	58,776	4	3,045	Medical	Fundraising
20	Sir Jules Thorn Charitable Trust*	1,950			1,500	Medical	Endowed
21	National Kidney Research Fund#	2,100	2,453	86	3,000	Medical	Fundraising
22	Cystic Fibrosis Trust*	1,904	7,455	26	2,355	Medical	Fundraising
23	RSPB*	1,800	46,114	4	2,000	Animal Health	Fundraising
24	Novartis Foundation*	1,745			*1,745*		Corporate
25	Tenovus#	1,597	3,871	41	*1,597*	Medical	Fundraising
26	Royal National Inst for the Blind*	1,500	72,715	2	1,500	Medical	Fundraising
27	William Harvey Research Institute#	1,480			1,300	Medical	Fundraising
28	Children N'wide Med Res Fund#!	1,440	1,600	90	*1,440*	Medical	Fundraising

29	Muscular Dystrophy Campaign*	1,356			*1,356*	Medical	Fundraising
30	Brain Research Trust*	1,342			1,450	Medical	Fundraising
31	The Gannocy Trust*^	1,300	4,500	29	550	Regional	Endowed
32	Lister Insti of Preventative Med*	1,276			*1,276*	Medical	Endowed
33	Tommy's Campaign#	1,276	1,702	75	*1,276*	Medical	Fundraising
34	Wellbeing*	1,200	1,295	93	1,000	Medical	Fundraising
35	British Lung Foundation#	1,144	2,409	47	1,080	Medical	Fundraising
36	SPARKS*	1,083	1,624	67	900	Medical	Fundraising
37	BUPA Foundation*	1,000			1,200		
38	NSPCC*	1,000	57,607	2	1,000	Children	Fundraising
39	Engineering & Marine T A*	1,000			500		Endowed
40	Nuffield Trust*	1,000			500		Endowed
41	Parkinson's Disease Society*	1,000	9,535	10	884	Medical	Fundraising
42	International Spinal Research Trust#	962	2,322	41	*962*	Medical	Fundraising
43	Meningitis Research Foundation#	897	1,576	57	1,004	Medical	Fundraising
44	Wessex Medical Trust	810	1,035	78	*810*	Medical	Fundraising
45	Wishbone Trust	809	1,394	58	*809*	Medical	Fundraising
46	North West Cancer Research Fund*	800			1,000	Medical	
47	National Heart Research Fund*	785	756	104	*785*	Medical	Fundraising
48	Scottish Hospital Endow. R Trust	795			*795*	Medical	Endowed
49	Breakthrough Breast Cancer#	746	5,929	13	*746*	Medical	Fundraising
50	Liver Research Trust	741			*741*	Medical	
51	Alzheimer's Society#	736	14,286	5	1,000	Medical	Fundraising
52	World Cancer Research Fund*	700	4,891	14	1,100	Medical	Fundraising
					849,003		

Sources: Director of Grantmaking Trusts; CAF's Top 500 Fundraising Charities 2000; AMRC Handbook 2000; JM Consulting research

* Research spend given for 1998
# Research spend given for 1998-9
" Research spend given for 1999
~ Income given for 1997
! Income given for 1998-9
a Income given for 1999
° Income given for 1999-2000

Table 11 CAF sources of income for fundraising charities

Voluntary income sources	1996-7 £m	1997-8 £m	% real terms change
Public			
- legacies	626	755	+14
- donations & gifts	1,341	1,581	+12
- charity shops	262	271	-
- gifts in kind	20	34	+38
Sub-total	2,249	2,641	+12
Other income			
- central/local government funds	474	456	-7
- European grants	66	48	-42
- other public grants	67	249	+72
- central & local govt/other public fees/payments	909	975	+4
- other trading	271	243	-15
- rent & investment	276	318	+10
- other income	51	49	-8
Sub-total	2,114	2,338	+6
Total	**4,363**	**4,979**	**+9**

Source: CAF's Top 500 Fundraising Charities, 2000

Note: The introduction of SORP may have led to inconsistencies in the reporting of income, particularly in the area of grants. Real-terms change, therefore, may not be entirely accurate if income has been reported in different categories from previous years. However, overall totals can be confidently compared.

Table 12 **CAF sources of income for fundraising charities by field of operation**

CAF Top 400 fundraising charities: % income by source & sector, 1996				
Sector	**% voluntary donations**	**% legacies**	**% grants & fees**	**% investment**
Benevolent funds	44.5	9.4	32.3	**12.5**
Social services	27.9	15.8	**49.6**	5.6
Religious	**48.2**	9.2	27.9	**13.1**
Medical	42.1	**27.3**	23.2	5.2
International	**58.4**	3.5	34.5	2.9
Children	39.5	10.3	**43.6**	5.1
Animals	36.0	**41.1**	13.8	8.4
Culture/leisure	34.3	7.3	**45.4**	**11.7**

Source: CAF's Top 500 Fundraising Charities, 2000

Appendix C
Results of survey of 'top 300' charities

Background

As part of the research programme for this study, a questionnaire was sent to the top 300 charities. Other work included: desk research; case studies (charities and HEIs); focus groups; and another quantitative study with a sample drawn from charities outside the top 300 by size but with research in their objects. This element of the research was undertaken between April and July 2001.

Methodology

Most recipients of the questionnaire were drawn from the Caritas database; an amalgamated list of the top 200 charities by funds and the top 200 charities by income was produced. This yielded just over 300 names. Charities that obviously did not meet the criteria for inclusion as a charity in this study (e.g. The British Council, NHS Trusts) were then excluded. This reduced the list to 263, then 26 more charities were identified and added from 'The Directory of Social Change'.

The 'top 300' questionnaire was more detailed than a questionnaire sent to smaller charities, and the design built on some of the information gathered from the first questionnaire. On areas covered by both questionnaires, a similar format was adopted, where possible, to facilitate comparison between findings.

In total, 106 questionnaires were returned. One was a composite response from a number of charities in the same group (seven of whom had been sent questionnaires). A further 26 respondents telephoned or sent an email stating that they did not fund research. In total, the response rate was 48%.

The findings are based on analysis of the 97 questionnaires returned that were completed and which met our criteria for inclusion as a charity.

The table below shows responses received by area of operation. Some notable differences emerged between the top 300 charities and the smaller charities that had responded to the first questionnaire:

- The proportion of respondents that are medical charities is significantly smaller in the second survey (35%, compared with 57% in the first survey). This appears to be more representative of make-up of the charitable sector as a whole and may suggest that small to medium sized medical charities are more likely to have research in their objects that larger charities.

- Although not directly comparable, general welfare as a category (18% of respondents) featured significantly in the second survey when compared to the 5% of respondents involved in social science and social policy in the first

BEST COPY AVAILABLE

questionnaire, whilst education did not feature in the first questionnaire, even amongst 'others'.

- Perhaps not surprisingly, the largest charities are more likely to be involved in more than one area of operation.

Area of operation	%
Medical	35
Education	18
General Welfare	18
Heritage & Environment	11
Religious & Missionary	10
International Aid	7
Youth	7
Disability	5
Arts & Recreation	4
Animal Health & Welfare	3
Other	21
Not known	1

Key findings

As the table below shows, there was a more even split between sources of funding than we found in the first questionnaire (where more than three-quarters of respondents claimed fundraising as their main source of funds).

Main sources of funds	%
Endowments	42
Public donations/voluntary income	39
Corporate donations/sponsorship	19
Other	37

Amongst other main income sources named, fees and investment income were the two most frequently mentioned. 29% of respondents claimed more than one main source of income.

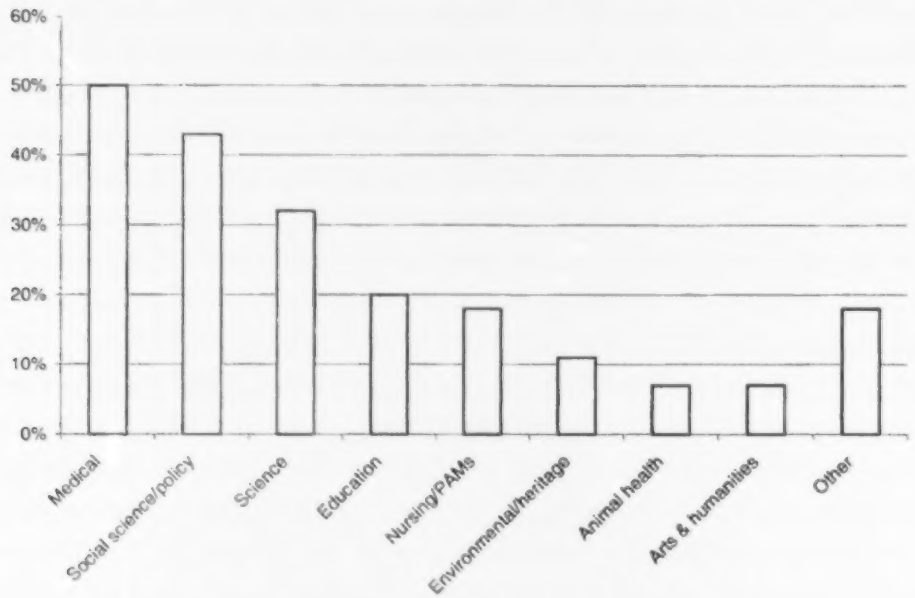
Of those who returned questionnaires, 58% funded research. However, when the 26 non-questionnaire responses are included, this drops to below one half of respondents (46%).

37% of respondents claimed they undertook research to inform the particular interests of heir charity, whilst 30% undertook research to support science and knowledge creation and 14% undertook it for the purpose of education.

BEST COPY AVAILABLE

The figure below shows the discipline areas in which respondents are funding research.

Figure 1: The discipline areas where charitable research is funded



The figures shown are for those funding any research. On this basis, social sciences and policy and education have a higher profile amongst the larger charities than amongst respondents to our first survey. Also interesting was the number of respondents funding in more than one area. Of those completing this question, just over a third funded in one area; just under a third funded in two areas and the remaining third were split equally between those funding in three areas and those funding in four or more. This suggests that many of the larger charities funding research have a wider sphere of interest than was typical in responses to the first survey.

The table below indicates respondents' research spend and number of projects for the three year period from 1998 to 2000. (For the purposes of this analysis, one respondent whose research spend was more than three times as large as the remaining respondents combined has been excluded to avoid distorting the figures.)

	1998	1999	% YOY Change	2000	% YOY Change
Total spend (£'000s)	119, 404	130,548	+9.3	159,629	+22.3
Av. spend per charity (£'000s)*	3,142	3,264	+3.9	3,470	+6.3
Total projects	1,512	1,583	+4.7	1,598	+0.9
Av. projects/charity*	44	47	0.0	44	0.0
Av. spend per project (£'000s)	79.0	82.5	+4.4	99.9	+21.1

* Based on number of respondents undertaking research in each year.

The figures suggest that the number of projects per charity remained relatively stable over the three year period, with a small increase in the number of charities supporting research and stronger growth in the average spend per project. Unlike the first survey, which suggested a levelling out of growth in the year 2000, the larger charities saw substantial growth in 2000 in both total spend and spend per project.

However, the averages above hide a broad spread of research spends, as shown in the table below.

Research spend in 2000	%
None at all	42
None in 2000	2
Less than £10,000	3
£10,000 - £49,999	2
£50,000 - £99,999	4
£100,000 - £499,999	17
£500,000 - £999,999	2
£1,000,000 - £1,999,999	9
£2,000,000 - £4,999,999	5
£5,000,000 - £9,999,999	2
More than £10,000,000	4
Not known	4

Of the 54 respondents who answered this question, half used a combination of internal assessment and peer review to select projects; one-quarter used internal assessment; and one-fifth used peer review. No other methods received more than one response. This contrasts with the first survey where peer review was more popular, a finding that appears to reflect the greater dominance (in numerical terms) of medical research charities in the first survey.

Of those who responded to the question, just over half (52%) conducted most of their research in HEIs, with a further 12% conducting all their research in HEIs. This is comparable with the findings of the first survey. More than one-fifth of those conducting research conducted at least some in-house, with commercial consultancies and NHS hospitals receiving a number of mentions. Only four respondents who supported research made no use of HEIs. Six respondents claimed to fund some

BEST COPY AVAILABLE

research in overseas universities and six respondents funded research in other institutions overseas. Although these numbers are relatively small, some charities indicated that they might consider overseas research funding in the future.

Amongst those who completed the question (only one-third of all respondents), the proportion of their research budget spent with HEIs was almost three-quarters.

The table below highlights the areas of research respondents are funding. (The percentages shown are calculated for those funding any research, not for all respondents.)

Area of research	%
Blue sky	18
Basic	66
Applied	59
Clinical trials/testing	25
Desk research and surveys	46
Skills development	16
Individual researchers	30
Other	20

This suggests that two-thirds of those funding any research (38% of all respondents) are funding some basic research, followed by three-fifths (34% of all respondents) funding applied research and just under half (26% of all respondents) funding desk research and surveys.

Figure 2 shows the type of research respondents are funding in HEIs. Again, the percentages shown are for those funding any research.

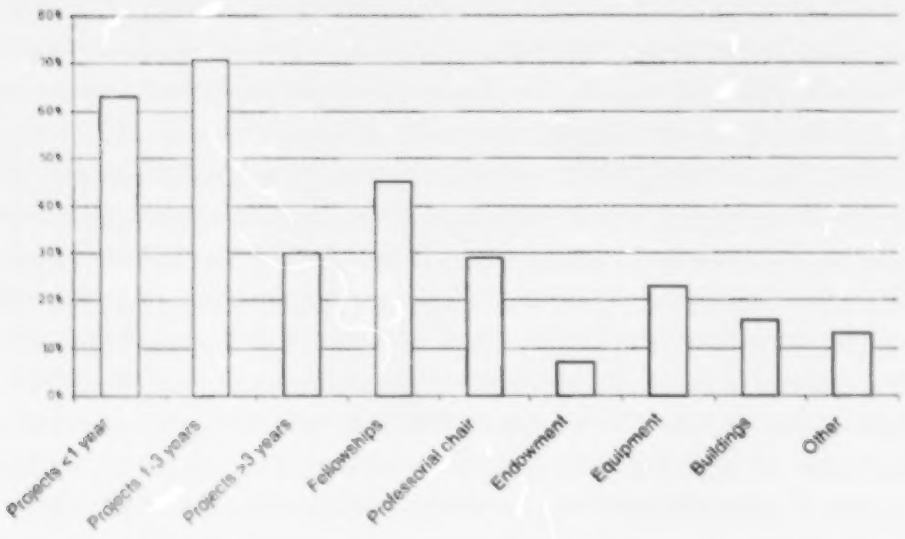
There was little difference between the duration of projects funded between the two surveys, with projects of less than three years duration tending to be more popular than longer programmes. However, the very largest funders of research were more likely to fund longer projects and felt that this was important in building longer term, effective links with HEIs.

Amongst respondents who completed the question, on average two-thirds (67%) of their research in HEIs was classified as 'collaborative'. However, this figure masks some extremes, with less than one-third of respondents giving a percentage other than 0% or 100%.

For the future, most respondents who answered this question (21 respondents), felt there was likely to be little or no change in the way they spent their research funds. Other responses receiving more than one mention were: increased research expenditure in general (5 respondents); planning an international research grants programme (2); may conduct more research in-house (2); will conduct less research in future (2); and a lower proportion of research spend will go to HEIs (2).

Figure 2: The type of research funded by charities

BEST COPY AVAILABLE



When it came to non-research links with HEIs, 80% of those who responded claimed to have these links. However, few specified the benefits of these links and there was little consistency amongst those who did.

The main benefits to charities of non-research links were felt to be access to advice and expertise (8 mentions) and networks (6). For HEIs the main benefits were thought to be access to additional funding (11 mentions), and kudos/credibility (6).

Respondents were asked what they saw as the main indicators of a successful research project. There answers were wide-ranging and those receiving more than three mentions are summarised in the table below.

This question was related to research in general and suggests a strong focus on both policy development and practical, usable outputs.

When respondents were asked what they felt were the main benefits of using an HEI to conduct research, their focus was very much on issues related to quality, although again there was a wide range of benefits that received only one or two mentions.

This diversity in responses reflects the diversity of the charity sector itself and has been a feature of all the open-ended questions in both surveys, as well as of the focus groups and interviews. It has implications for institutions as it can make categorising the sector and responding to its needs in an effective manner more complex. However, there are sufficient issues of common interest to provide scope for action.

BEST COPY AVAILABLE

Success factor	No. of mentions	Av. ranking*
Input to policy/practice development	16	2.2
Benefits to users	14	2.5
Achievement of objectives/high quality	12	2.8
Relevance/contribution to charity's objectives	11	2.5
Practical applications	10	2.1
Cost-effective/value-for-money	8	1.4
Effective dissemination of results	7	1.9
Enhanced knowledge	5	2.2
Originality/innovation	5	2.0
Status/reputation of researchers	5	1.0

* Respondents were asked to rank their answers in order of importance to them. The first response scored 3 points; the second 2 points; and the third 1 point. The average ranking is derived from this scoring system and the same system has been used for the tables on benefits and concerns.

The main benefits of working with HEIs are summarised below.

Benefit	No. of mentions	Av. ranking
Rigour/high quality work	11	2.7
Research infrastructure/facilities	10	1.7
Quality of researchers	9	2.7
Peer input/contact with other researchers	8	1.8
Reputation/credibility	7	1.9
Objectivity/impartiality	6	2.5
Depth of knowledge/expertise	6	1.5
Dissemination/more likely to reach public domain	4	2.2

The responses to what institutions could do to improve their project management showed even more diversity, as highlighted in the table below which lists all concerns receiving more than three mentions.

Area for improvement	No. of mentions	Av. ranking
Improved financial management	9	2.6
Better project management	4	3.0
Lower cost to charity	4	2.3
Wider dissemination to practitioners	4	2.3
Use more accessible language/plain English	4	1.3
Clearer negotiation of IPR/copyright	4	1.0

This suggests that the focus for improvements should be on management and administration, particularly on the finance side.

BEST COPY AVAILABLE

Respondents were also asked to say how strongly they agreed or disagreed with a number of statements, where '1' was agree strongly; '2' was agree; '3' was neither agree nor disagree; '4' was disagree; and '5' was disagree strongly.

The statements were chosen to reflect issues raised in focus groups and interviews. Findings are summarised in the table below. The response rate to this question was relatively low, with between 36 and 42 responses to each statement.

For the most part, average scores are clustered closely around the middle ground, with only 'universities and colleges usually manage our projects well' and 'payment of overheads on research projects is a divisive issue for charities and our colleagues in universities and colleges' – at 2.2 each, showing a more marked trend towards agreement.

Although numbers are small and no firm conclusions can be drawn, it is worth noting, that the charities with the largest research spends were more likely to agree with the statement that 'we are regularly asked to fund equipment that we would have expected to be in place in the past'.

For the future, three-quarters of those responding to the question (or one-third of all respondents) thought their research spend would remain about the same, whilst 12% (5% of all respondents) thought it would increase and 14% (6% of all respondents) thought it would decrease. This suggests that the growth experienced in recent years is unlikely to be maintained, a finding in line with findings from the focus groups and discussions, and from the first survey.

Statement	Average score
Universities and colleges usually manage our projects well	2.2
The research infrastructure in UK universities/colleges is generally strong	2.6
We are regularly asked to fund equipment that we would have expected to be in place in the past	3.2
It is getting harder to attract talented young people into research careers in my charity's area of interest	2.9
A university department's RAE score is a strong indicator of its ability to conduct high quality research in my charity's area of interest	2.8
Research conducted by universities and colleges usually receives wider recognition than the research we fund in other organisations	2.9
Payment of overheads on research projects is a divisive issue for charities and our colleagues in universities and colleges	2.2
My charity would spend more research funds in universities and colleges if we received more A grade applications that met our needs	3.0

Three respondents felt there was nothing HEIs could do to increase their share of research spend. Two mentions each were received by: submit more competitive quotations; improve administration; and promote the value of applied

BEST COPY AVAILABLE

science/research. No other factor received more than one mention; this question had a low response rate.

Appendix D

Illustrations of cost recovery on charity and Research Council funded projects

This Appendix describes a standard costing and income model for externally sponsored research projects. The main findings are summarised in the Mapping and Good Practice Report.

The income model is based on the HEFCE research funding method (although it is accepted that this funding is granted to institutions on the basis of a block grant, along with Teaching funding). SHEFC and HEFW funding is on a different basis and is not shown here.

Funding for projects are then matched with a not untypical cost profile of those projects. The two cost profiles shown were derived from discussions with institutions and inspections of a sample of research grant forms.

UoA = unit of assessment (subject) of which there are 69
The 'unit of resource' 2001/02 are the QR funds per research volume (excluding funds for support and tuition of PG research students and funds for London weighting). A unit of research volume is 1.00 WTE core academic member of staff (e.g. permanent investigator, PI).

A description of the (HEFCE) QR funding methodology is given below.

> The amount of funding that institutions receive from HEFCE as a result of their charity-funded research can be expressed in terms of a 'unit of resource' (which depends on the total volume of charity-funded research, and the total funds that HEFCE have available. It is also affected by the quality-weighted volumes in each UoA.) The 'unit of resource' is determined by HEFCE each year. The amount received by institutions is calculated in terms of the volume of research, multiplied by the unit of resource multiplied by a quality weighting. The quality weightings are related to RAE rating:
>
> | Rating | Weight |
> |---|---|
> | 3b | 1 |
> | 3a | 1.5 |
> | 4 | 2.25 |
> | 5 | 3.35 |
> | 5* | 4.05 |
>
> Research work attracts funding through this QR system in a way which is linked to volume factors These are: number of permanent staff carrying out research (receiving 1.0 unit of resource per FTE), numbers of research assistants (receiving 0.1 unit of resource per FTE), numbers of fellows and studentships, and amount of charitable income. The latter is relevant only to charitable work. Up to 2000/01, charitable income received a unit of resource calculated as 0.25*income/25000. In 2001/02 this has been calculated at a lower rate of 0.228*income/25000 to retain the total QR monies allocated on the basis of charitable income at the same overall percentage of QR.

The analysis which follows assumes that the income on charitable work reflects the way in which the HEFCE allocates its' funds to institutions. This is different from alternative approaches which could be based on either:

(a) the way the HEFCE is funded (which arguably does not cover charitable activity
(b) the way that institutions allocate their funds internally. They receive a block grant from the hefce and can allocate this as they see fit. There is a wide range of internal resource allocation methods in use in the sector, and many of these do not reflect the HEFCE methods.

The following pages in Appendix D assume the HEFCE method for income allocation.

BEST COPY AVAILABLE

unit of resource - 2001-02	rating	hospital based clinical UoA 3	education UoA 68
£ in QR received for each WTE 'core funded' academic	5*	34056	22562
	5	28372	18802
	4	18915	12534
	3a	12610	8356
	3b	8406	5571

The unit of resource for UoA 3 is broadly similar to that for UoAs 1 and 14, which together account for nearly 60% of charitable income.
However, units of resource differ widely. For 5* departments in high cost subjects (UoAs weighted 1.7) they vary from 42,819 to 25,269).
UoA 68 is in the 'other' subjects category (weighted at 1.00) and is the largest UoA there in terms of charitable income although in total it accounts for only 1% of total charitable income.

receivable in funding from sponsor	charities	Research Councils	EU
direct:			
RA	all	all	all
technician	all?	all?	all
PI	0	0	0
non-staff	all	all	all
overheads:	0	0.46 of tot direct staff costs excl PI	0.2 of tot direct costs excl PI ie income
volume weight for QR (all quality rated)			
per RA WTE	0.1	0.1	0.1
per PI WTE	1	1	1
per £income	0.00000912 (228 * 1 / 25000)	0	0
plus GR (not quality weighted)			0.065 of income

BEST COPY AVAILABLE

assumed annual costs on project

		total costs (irrespective of sponsor)	total direct costs excl PI ie income	total direct *staff* costs excl PI
education				
	factor	£	£	£
direct:				
RA	1	25000		
secl/admin	0.1	2000		
PI	0.2	8000		
non-staff		7000	34000	27000
overheads:	1.25 staff	43750		
total costs		85750		
hospital clinical				
	factor	£	£	£
direct:				
RA	1	25000		
technician	0.5	10000		
PI	0.2	8000		
non-staff		10000	45000	35000
overheads:	1.25 staff	53750		
total costs		106750		

Example of income calculation
based on hospital clinical cost structure

		charities	Research Councils
for UoA 3 5*			
RA	-1	25000 + (0.1 * 34056)	25000 + (0.1 * 34056)
technician		10000	10000
PI	-0.2	.2 * 1 * 34056	.2 * 1 * 34056
non-staff		10000	10000
overheads:		0.228 * 34056 * 45000/25000	0.46 * 35000
income		69193	71317
deficit as % costs		-35	-33

BEST COPY AVAILABLE

Variations in assumptions for UoA 3 - 5* dept		charities	R Cncls
(the above assumes QR on PI input is attributable to both charities and Research Council projects; also assumes that the technician's costs are funded by the charity)			
if the QR on charitable income was still 0.25:			
income		70542	71317
deficit as % costs		-34	-33
if there are no technicians on the project:			
total costs become	84250		
income		56087	56717
deficit as % costs		-33	-33
if the technician's costs are not funded by the charity:			
income		56087	71317
deficit as % costs		-47	-33
if the non-staff costs are £35,000, not £10,000:			
total costs become	131750		
income		103307	96317
deficit as % costs		-22	-27
if overheads are 150% of staff costs, not 125%			
total costs become	117500		
income		69193	71317
deficit as % costs		-41	-39

Income by research sponsor (including QR)

UoA 68 education	charities	Research Councils	EU
5*	50028	53189	47569
5	47357	52061	46441
4	42904	50180	44560
3a	39936	48927	43307
3b	37958	48091	42471

UoA 3 hosp clin	charities	Research Councils	EU
5*	69193	71317	64217
5	65155	69612	62512
4	58437	66775	59675
3a	53958	64883	57783
3b	50972	63622	56522

BEST COPY AVAILABLE

Deficit by research sponsor (having included QR)

UoA 68 education	charities	Research Councils	EU
5*	-35722	-32561	-38181
5	-38393	-33689	-39309
4	-42846	-35570	-41190
3a	-45814	-36823	-42443
3b	-47792	-37659	-43279

UoA 3 hosp clin	charities	Research Councils	EU
5*	-37557	-35433	-42533
5	-41595	-37138	-44238
4	-48313	-39976	-47076
3a	-52792	-41867	-48967
3b	-55778	-43128	-50228

Deficit (having included QR) as % cost

UoA 68 education	charities	Research Councils	EU
5*	-42	-38	-45
5	-45	-39	-46
4	-50	-41	-48
3a	-53	-43	-49
3b	-56	-44	-50

UoA 3 hosp clin	charities	Research Councils	EU
5*	-35	-33	-40
5	-39	-35	-41
4	-45	-37	-44
3a	-49	-39	-46
3b	-52	-40	-47

Deficit excluding QR as % cost

all ratings	charities	Research Councils
hospital clinical	-58	-43
education	-60	-46

Contribution (excluding QR) to overheads (as % direct staff costs including PI)

all ratings all UOAs	charities	Research Councils
	0	37
note: required to cover overheads	125	125

BEST COPY AVAILABLE

Appendix E

The total costs of research activity for charities and Research Councils, and their funding

		1999/2000 actual: **research work for research councils** £m		1999/2000 actual: **research work for charities** £m		***recommended:* research work for charities** £m	
Total costs *(a)*			824		822		822
Funding							
Direct costs	funded by sponsor	RCs	485	charities	484	charities	484
Support costs	funded by sponsor	RCs *(b)*	120	charities	0	charities *(c)*	50
	assumed Government funding to funding councils	Government *(d)*	219	Government *(e)*	0	Government	258
	funding by HEIs	HEIs	0	HEIs	338	HEIs *(f)*	30
total funding			824		822		822

a The total costs on charitable activity have been calculated assuming a deficit on income of 70% (source: informal Transparency Review data). The deficit on Research Council activity has been assumed to be the same, adjusted for the additional Support cost recovery.

b RC funding of Support costs plus direct costs equals income excluding funding council funding of £604m. Support costs of £120m broadly equals 46% of staff costs allocated to research activity for RCs (source: HESA FSR) leaving £485m as direct costs

c A 10% (net) contribution by charities to cover people and project management costs (15% total, but assuming a 5% additional spend by HEIs) would total around £50m

d This assumes that the dual support system (QR and RC contribution) should cover all Support costs on RC contracts.

e Charities are not explicitly covered under the dual support system - the funding councils receive no explicit transparent stream of funding for this activity. The HEFCE funding of Support costs based on charitable income levels has been created by top-slicing total funding for HE. This funding currently totals some £70m. SHEFC funding is on a broadly similar basis but one which also recognises RC income and other sponsors' income levels as well as charities.

f Government funding would be for approved charities only. It is assumed here that 10% of the activity will be for unapproved charities, and the Support costs on this activity would be covered by the HEIs.

BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

[X] This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

[ ] This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").